TRUE

TRUE v2 Rating System



Chou Hall | TRUE Platinum | Berkeley, CA, U.S. | Photo: Blake Marvin Photography

TABLE OF CONTENTS

Preface 4

Scope 6

Project 6
Events and Construction 6
Materials Scope 7
Acceptable Means of Diversion 8
Diversion Calculation 8

Precertification 9

Key Terminology 11

Required Project Information 13

Rating System Overview 14

Prerequisites 15
Credits 15
Credit Structure 16
Options 17
Plan and Implement 17

Scorecard 18

Fundamentals and Planning 21

Prerequisite 1: Establish Zero Waste Goal and Policy 24
Credit 1: Engage Upper Management in Zero Waste Activities 26
Credit 2: Establish a Zero Waste Manager 28
Credit 3: Include a TRUE Advisor in Project 30
Credit 4: Right-Size Collection 31
Credit 5: Label Container and Collection Areas 33
Credit 6: Engage Service Providers in Zero Waste Goals 35

TABLE OF CONTENTS

Measurement and Analysis 37

Prerequisite 1: Standardize Waste Tracking System 40
Prerequisite 2: Conduct a Waste Audit 42
Credit 1: Expand Material Tracking 44
Credit 2: Implement Financial Data Tracking 46
Credit 3: Conduct a Comprehensive Zero Waste Audit 48
Credit 4: Analyze and Execute Waste Audit Findings 51
Credit 5: Verify End of Use or Life 55

Sourcing and Circularity 58

Prerequisite 1: Develop a Purchasing Policy 61
Credit 1: Develop Purchasing Resources 63
Credit 2: Engage the Supply Chain 65
Credit 3: Prevent and Reduce Within the Supply Chain 68
Credit 4: Purchase Consumables for Zero Waste 70
Credit 5: Purchase Durable Goods for Zero Waste 72
Credit 6: Advance Local Circularity 74

Reduction and Diversion 77

Prerequisite 1: Develop a Zero Waste Logistics Plan 80
Credit 1: Reduce Hazardous Materials 82
Credit 2: Divert Across the Points of Generation 85
Credit 3: Facilitate On-Site Reuse 89
Credit 4: Manage Organics 90
Credit 5: Manage Universal Waste (Common Hazardous Waste) 92
Credit 6: Reduce Contamination 94

Training and Education 97

Prerequisite 1: Conduct a Zero Waste Orientation 100
Credit 1: Communicate Zero Waste Initiatives 102
Credit 2: Train Personnel 103
Credit 3: Engage Personnel 106
Credit 4: Train Procurement Personnel 107
Credit 5: Engage the Community 109
Credit 6: Establish Local Partnerships 111

TABLE OF CONTENTS

Performance and Impact 116

Prerequisite 1: Meet 90% Diversion Performance 117
Prerequisite 2: Evaluate Greenhouse Gas Emissions 118
Credit 1: Excel in Zero Waste Diversion 119
Credit 2: Prioritize Preferred Diversion Strategies 121
Credit 3: Evaluate Material Emissions 123
Credit 4: Calculate Transport Emissions 125
Credit 5: Determine Zero Waste Financial Impact 127
Credit 6: Identify Zero Waste Community Impact 129
Credit 7: Minimize Waste Generation 131

Project Priority 134

Glossary 136

Resource Web Pages 141

Appendix 1: Project Priority Library 1

Appendix 2: Supplementary Guidance 1

Preface

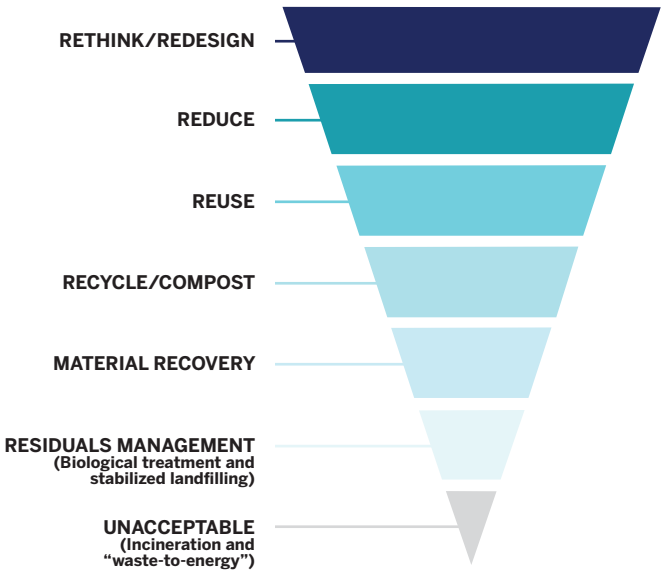
TRUE (Total Resource Use and Efficiency) is a zero waste certification program used by buildings, businesses, and communities to define, pursue, and achieve their zero waste goals, driving the development of circular materials management infrastructure, behavior, and best practices worldwide.

The processes involved in resource extraction, use, and disposal create significant environmental impacts that are among the most challenging to reduce. Globally, we are extracting, consuming, and disposing of materials faster than the planet's capacity for replenishment. This results in unsustainable consumption and production and ever-increasing amounts of waste and disposal in an inherently linear system. Notable statistics include:

- 2.1 billion metric tons of municipal solid waste were generated globally in 2023, not including waste from construction and demolition, industrial processes, agriculture, or health care. This number is expected to increase to 3.8 billion metric tons by 2050.[1]
- 3.5% of global greenhouse gas emissions result from waste, not including the energy needed for waste processing and treatment.[2] Additionally, waste management and disposal have a high impact on land use, biodiversity, pollution generation, and human health.
- 38% of waste is currently uncontrolled, meaning it is not properly collected and disposed of, leading to increased pollution in waterways, the air, and communities.[1]

The pressure is on to address the global waste problem through rethinking waste, implementing a circular economy, minimizing resource use, and extending the lifespan of materials.

Figure 1: Zero Waste Hierarchy[3]



TRUE aims to help address these critical impacts by driving widespread implementation of zero waste solutions that enable healthier, greener, and more socially responsible systems and communities. The rating system provides a framework for facilities and businesses to help identify and implement waste reduction and diversion practices to achieve zero waste.

Zero waste is defined by the Zero Waste International Alliance (ZWIA) as "the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."[3] TRUE aligns with the Zero Waste

[1] UN Environment Programme. Global Waste Management Outlook 2024. *unep.org/resources/global-waste-management-outlook-2024*

[2] Mengpin Ge, Johannes Friedrich, and Leandro Vigna. Where Do Emissions Come from? World Resources Institute. Published 2020, Updated 2026. *wri.org/insights/4-charts-explain-greenhouse-gas-emissions-countries-and-sectors*

[3] Zero Waste International Alliance. Zero Waste Definition. n.d. *zwia.org/zero-waste-definition/*

Preface

Hierarchy, shown in Figure 1, to prioritize waste reduction and diversion actions according to the highest environmental value.

TRUE is a whole-systems approach aimed at changing how materials flow through society, ideally eliminating waste. TRUE encourages the redesign of resource life cycles such that products are kept in a useful state and promotes processes that consider the entire life cycle of materials. TRUE serves as a roadmap to guide projects through zero waste programs, from initial planning through execution and measurement.

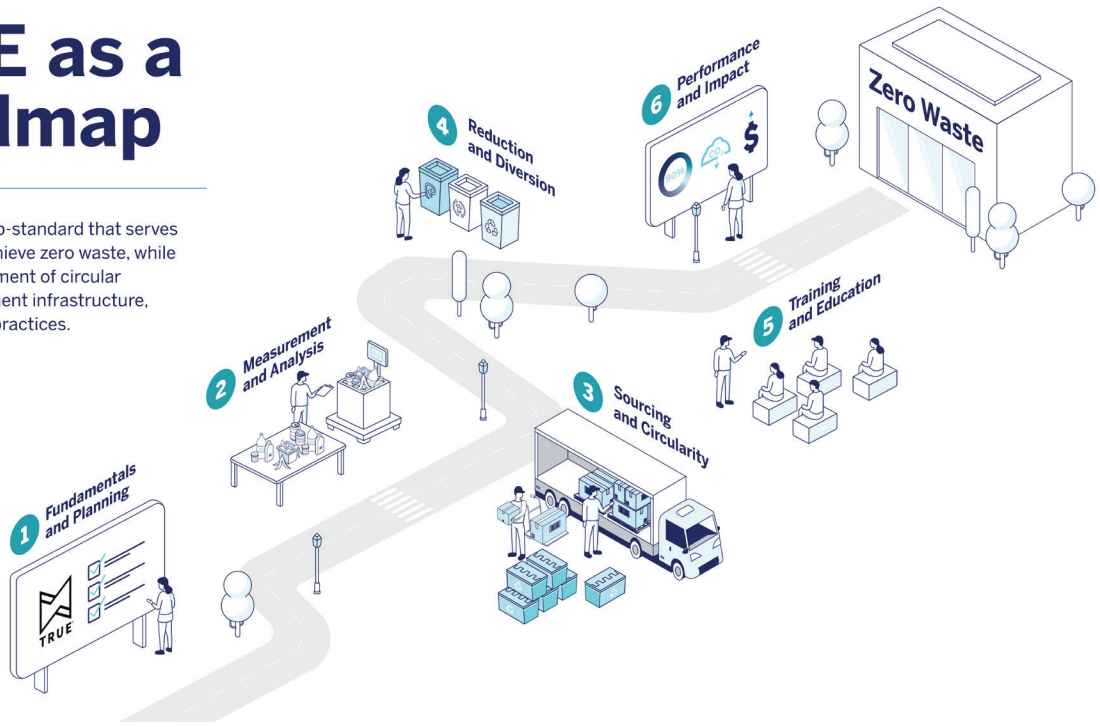
TRUE aims to act as a leadership standard and model for zero waste certification and achieve impact through the following:

TRUE Impact Areas

Closing the Loop	Decarbonization	Business Transformation
Extending the life of materials for as long as possible by cultivating circular systems to preserve land, ecosystems, and natural resources.	Reducing emissions across the full life cycle of the materials we use, creating a safer and more stable climate for future generations.	Driving more efficient business practices, reducing costs, and transforming supply chains to advance healthier economies.

TRUE as a Roadmap

TRUE is a leadership-standard that serves as a roadmap to achieve zero waste, while driving the development of circular materials management infrastructure, behavior, and best practices.



Scope

PROJECT

The TRUE Rating System applies to physical facilities and their operations. The facility (or group of facilities on one property) applying for certification is defined as a "project." A project is defined by the legal property boundary, which may or may not include multiple buildings. For projects located on publicly owned land, within a greater facility not seeking certification, or campuses that do not have internal property lines, the project boundary may use the legal limits of the campus or define an alternative boundary that is wholly contained within the legally owned site. It may not exclude sections of the property to create boundaries in unreasonable shapes for the sole purpose of achieving certain credits. The current rating system does not certify the owner/organization or their products or services as zero waste.

Other criteria for defining the project are as follows:

- All operations must occur within the defined project boundary and be consistently accounted for in requirements and credit documentation.
- The entire area contained within the project boundary must be held by the same ownership, property manager, or developer, or be maintained under one operating body.
- The facility (or facilities) included in the project must be operational for a minimum of 12 months.
- The 12 months of data provided for certification (reporting period) must be consecutive and be within 120 days of submittal for certification.
- There is no maximum or minimum size for a project to be considered eligible for certification.

EVENTS AND CONSTRUCTION

The TRUE Rating System may be adapted for events and construction projects pursuing TRUE certification. Events and construction projects applying for certification must adhere to the same definition of zero waste, diversion calculation method, and acceptable diversion methods provided in the TRUE Rating System and **Supplementary Guidance** (refer to Appendix 2).

The Rating System and certification process for events and construction projects pursuing TRUE v2 is the same as for physical facilities. All prerequisites in the Rating System are required. All credits are available to events and construction projects. To adapt prerequisites and credits to events or construction projects, follow the guidance under the Adaptations section of the credit for **Events** or **Construction**. Note that not all prerequisites and credits have adaptation guidance; in such cases the requirements must be followed as written. The Project Priority category can be used to pursue adaptation-specific strategies through the Project Priority Library or open-ended Innovation credits.

Some credits allow the event or construction project to be compared to a previous event or construction project, if applicable. If pursuing that option, projects must provide a description of the previous event or project, detailing why it is a comparable baseline, as stated in **Required Project Information**.

Additional information for each adaptation can be found below.

Scope

Events

An event is defined as a public or private organized gathering of people at a predetermined place and time. Examples include, but are not limited to, conferences, festivals, entertainment events, and sporting events. The physical project boundary for TRUE certification is defined as the boundary of all event activities and operations within a site. Aspects of the event occurring in separate physical locations may be included in the certification scope and total square footage, according to the same boundary definition. A project may not exclude areas of the event to create boundaries in unreasonable shapes for the sole purpose of achieving certain credits. There is no minimum or maximum event size; any event can be certified so long as TRUE requirements can be met. The rating system does not certify the event owner or their products or services as zero waste.

The **Materials Scope** (as described in the subsequent section) must be applied the same way as with full projects, with the clarification that the certification is intended for materials generated for disposal or diversion by event operations and attendees. The event must be able to quantify its waste separate from other events or operations occurring in the same space that are not part of the event scope.

Construction

A construction project is defined as any work carried out in the construction of new structures and/or major renovation of existing structures. There is no maximum or minimum size for a construction project to be considered eligible for certification.

The physical project boundary for a construction project is defined as the legal property boundary and any construction activities and processes within that boundary. This must include all onsite construction work, temporary project trailers, and any other relevant operations that take place within the project boundary. The project may not exclude sections of the property to create boundaries in unreasonable shapes for the sole purpose of achieving certain credits. The rating system does not certify the owner/organization or their products or services as zero waste.

The entire duration of the construction project must be included in the project scope including the following phases as applicable depending on the project owner's scope of work:

- Site preparation prior to development (e.g., land clearing, utilities)
- Demolition or deconstruction.
- New construction/renovation.

Projects should apply for certification only after the certificate of occupancy or a similar document verifying project completion has been received. Diversion data must be provided for the entire duration of construction. Projects applying for certification must submit data and the TRUE application within 6 months of the receipt of the certificate of occupancy or equivalent, verifying project completion.

MATERIALS SCOPE

TRUE certification encompasses all solid, non-hazardous discards (referred to herein as "materials" or "material types") generated within the project boundary. This includes materials generated during regular

Scope

operations as well as those generated during episodic activities (e.g., construction and demolition and special events). Hazardous materials are defined by the project's local jurisdiction, state, or country. Liquid wastes are included in the scope of materials if they are accepted in a landfill, incineration, or waste-to-energy facilities by the local jurisdiction, state, or country. Wastewater is not included. For additional information, refer to the **Supplementary Guidance**.

ACCEPTABLE MEANS OF DIVERSION

The following activities are all considered acceptable forms of diversion and may be included in the diversion calculations:

- **REDUCTION** – Efforts to reduce the generation of materials can be recognized in the diversion calculations provided that the reductions are documented from an established baseline representing previous operations.
- **REUSE** – Avoided disposal resulting from the reuse of materials.
- **COMPOSTING** – Organic matter decomposed by microorganisms into a soil amendment.
- **RECYCLING** – Materials converted into manufacturing feedstock material and used in the creation of new products (excludes use as a fuel substitute or for energy production).
- **ANAEROBIC DIGESTION** – Organic matter broken down by microorganisms into a soil amendment in the absence of oxygen (byproducts must be recovered for productive use in nature and cannot be used as fuel or for energy production).
- **OTHER PROCESSING TECHNOLOGIES** – Processing technologies in which the end product is recovered for productive use in nature or the economy (not including incineration or waste-to-energy (WtE)).

DIVERSION CALCULATIONS

All those seeking certification must provide waste diversion calculations. These numbers must be used consistently across all requirements and credits. The diversion rate accounts for all activities within the project boundary and includes all materials generated within that boundary. Diversion rate is calculated by weight as follows:

Diversion = Material Weights (Reduce + Reuse + Compost + Recycle)

Total Generation = Material Weights (Landfill + WtE + Incineration + Diversion)

$$\textbf{DIVERSION RATE (\%)} = \left[\frac{\text{Diversion Generation}}{\text{Total Generation}}\right] \times 100$$

TRUE does not require a standard unit of weight. However, all materials must be tracked and calculated using the same unit of measure chosen. For more details on the calculation of diversion, please see the Performance and Impact category.

Precertification

TRUE precertification recognizes projects that have implemented fundamental actions and policies needed to effectively pursue zero waste and have demonstrated a commitment to achieving TRUE certification. Precertification is an optional, incremental pathway to formal certification that prioritizes the core actions essential to a successful start.

To achieve precertification, projects must comply with the definitions and requirements stated in the "Scope" section of the TRUE v2 rating system. Projects must also provide the "Required Project Information."

To pursue precertification, projects must comply with all prerequisites and an additional six (6) credits, as outlined in the following table. There is no minimum diversion performance requirement in precertification, and the required monthly data reporting period is reduced to three (3) months from the 12-month reporting period. Some prerequisites and credits in the following table include modifications for projects seeking precertification. Other than the stated modifications in the table, projects must follow the requirements and documentation needs for the prerequisites and credits as outlined in the TRUE v2 rating system.

Precertification

Requirements	Modifications
Prerequisites	
FPp1: Establish Zero Waste Goal and Policy	
MAp1: Standardize Waste Tracking System	Minimum of three (3) months of data required
MAp2: Conduct a Waste Audit	
SCp1: Develop a Purchasing Policy	
RDp1: Develop a Zero Waste Logistics Plan	
TEp1: Conduct a Zero Waste Orientation	
PIp1: Meet 90% Diversion Performance	Diversion must be measured, but no minimum diversion required
PIp2: Evaluate Greenhouse Gas Emissions	
Credits	
FPc1: Engage Upper Management in Zero Waste Activities	Option 1 and/or Option 2 can apply
FPc2: Establish a Zero Waste Manager	
MAc5: Verify End of Use or Life	Only "Plan" option required
SCc2: Engage the Supply Chain	Only "Plan" option required
RDc2: Divert Across the Points of Generation	Only "Plan" option required
TEc1: Communicate Zero Waste Initiatives	Only one quarter of initiatives must be documented

Key Terminology

The following key terms are used throughout the TRUE Rating System. Additional term definitions can be found in the Glossary.

MATERIAL TYPE – A classification that groups materials with similar properties for purposes of managing them in a system (e.g., metal, plastic, and glass).

PERSONNEL – The employees or staff who work for a project location that is seeking TRUE certification. Personnel include all levels and types of staff (e.g., upper management, procurement, fabricators, custodial, and human resources). Personnel can also include contractors, service providers, visitors, customers, or others who come into the project boundary.

POINTS OF GENERATION – The Points of Generation are areas within a project that are sources of diverted and disposed-of materials. The areas can be unique to each project but help categorize strategies, procedures, and zero waste efforts. The Points of Generation can include, but are not limited to, warehousing and distribution, offices, food services, grounds, construction, manufacturing, retail, and housing and hospitality.

PRODUCT TYPE – A category of purchased goods with similar composition and characteristics that can be either consumable (e.g., single-use service ware, food, and paper products) or durable (e.g., computers, equipment, and furniture).

PROJECT – The facility (or group of facilities on one property) applying for certification is considered a "project." For additional guidance on what defines a "project," refer to the Scope section.

PROJECT BOUNDARY – A project is defined by the legal property boundary, which may or may not include multiple buildings. For projects located on publicly owned land, within a greater facility not seeking certification, or campuses that do not have internal property lines, the project boundary may use the legal limits of the campus or define an alternative boundary that is wholly contained within the legally owned site. For additional guidance on project boundary, refer to the Scope section.

PROJECT TEAM – A group of project personnel that may include employees and/or contractors who are responsible for zero waste planning, implementation, and TRUE certification submittals.

SERVICE PROVIDER – A vendor that provides management and/or collection services for refuse and/or reusable/recyclable materials. Service providers include both private and public entities. Examples include waste haulers, janitorial services, and recovery/recycling facilities.

WASTE AUDIT – Physical analysis of waste, including separation by material and disposal type to better understand waste at the project and identify opportunities for waste diversion and contamination reduction.

ZERO WASTE – The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.[3]

Key Terminology

ZERO WASTE AUDIT – A **Zero Waste Audit** builds on a **Waste Audit** to focus on preventing waste by evaluating waste at each **Point of Generation** and identifying upstream opportunities for reduction and diversion.

ZERO WASTE HIERARCHY – The Zero Waste Hierarchy provides a structured framework for waste prevention, material recovery, and sustainable resource management. It is designed to guide policymakers, businesses, and individuals and expands on the widely recognized 3Rs (Reduce, Reuse, Recycle) to prioritize actions that drive systemic change toward a circular economy. The Hierarchy serves as a key policy tool for developing zero waste strategies and fostering a more sustainable future.[4]

ZERO WASTE INTERNATIONAL ALLIANCE – ZWIA was formed in 2003 to promote positive alternatives to landfill and incineration and to raise community awareness of the social and economic benefits to be gained when wasted materials are regarded as resources that can create both employment and business opportunities.[5]

[4] Zero Waste International Alliance. Zero Waste Hierarchy. n.d. *zwia.org/zwh*

[5] Zero Waste International Alliance. n.d. *zwia.org*

Required Project Information

The following documentation and information must be provided by project teams to give an overview of the project and its general operations:

- [ ] **A narrative that provides a general description of the project.**
- [ ] **A site map of the full project boundary, including all relevant buildings, with all waste enclosures and service collection containers clearly marked and labeled.**
- [ ] **Photographs and/or short videos showing enclosure spaces and internal collection areas to provide a representative sample of facility waste and material collection.**
    - [ ] If providing photographs, include at least one photograph per outdoor enclosure or service provider collection area and at least one photograph per generation area type (e.g., kitchens, break rooms, administrative spaces, warehouse, and labs).
    - [ ] If providing a short video, include images of each outdoor enclosure or service provider collection area as well as images of the internal collection area for each generation area type (e.g., kitchens, break rooms, administrative spaces, warehouse, and labs).
- [ ] **Floor plans of all interior facility spaces within the project boundary with key interior collection areas marked and labeled (if available).**
- [ ] **Confirmation that the project meets all federal, state/provincial, and local solid waste, hazardous waste, and material diversion laws and regulations. Confirmation that the project complies with all air, water, and land discharge permits required for collection, handling, and/or processing of materials.**

Rating System Overview

This document contains the base requirements and credits of the TRUE Rating System.

CREDIT CATEGORIES

Credits in the rating system are organized into seven (7) categories including a Project Priority (PR) category (see Table 1). The rating system consists of a total of 100 possible credit points. A minimum of 40 credit points must be earned for a project to achieve certification.

The PR category includes credit options such as innovation, facility-specific credits, and adaptation credits. Other than the required prerequisites discussed below, it is not required to earn a credit in every category and there is no minimum number of categories in which credits must be earned. An overview of each category is provided at the beginning of each category section.

Each credit category has an abbreviation, which can be found in the parentheses next to each category name in Table 1. Each credit in the category is assigned a reference code with the category abbreviation and the associated prerequisite or credit number (e.g., Fundamentals and Planning, Credit 3: Include a TRUE Advisor in Project would be FPc3).

Table 1: Credit Categories and Available Points

Credit Category	Points
Fundamentals and Planning (FP)	7
Measurement and Analysis (MA)	7
Sourcing and Circularity (SC)	16
Reduction and Diversion (RD)	23
Training and Education (TE)	11
Performance and Impact (PI)	21
Project Priority (PR)	15
Total	**100**

CERTIFICATION LEVELS

The certification levels and required number of earned points follow.

Certified	Silver	Gold	Platinum
40–49 points	50–59 points	60–79 points	80+ points

Rating System Overview

PREREQUISITES

Each credit category contains at least one prerequisite. These requirements provide foundational first step(s) and the basis upon which subsequent credits are achieved. There are eight (8) required prerequisites. All prerequisites must be met if a project is to be considered for any level of certification.

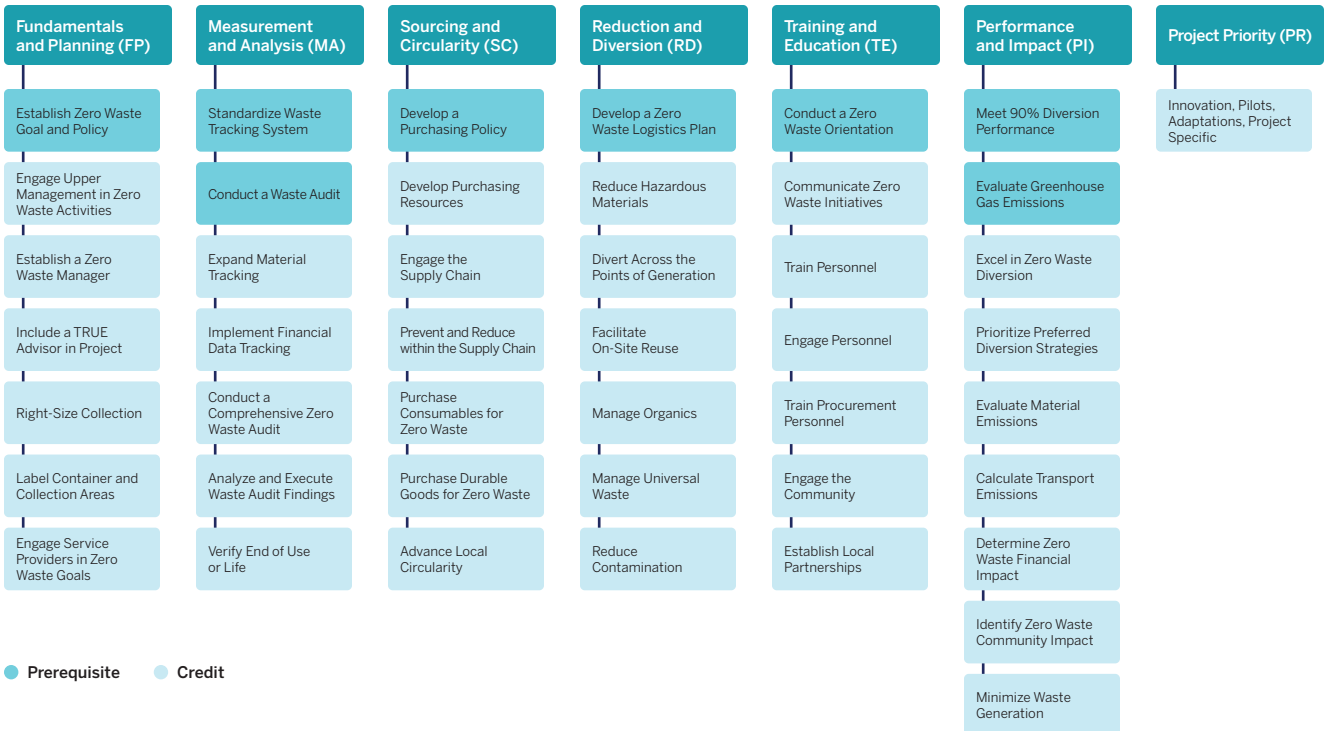
The rating system uses the prerequisites to build a strong foundation for zero waste and facilitate the achievement of credits across the categories. The prerequisites in each category identify policies, systems, and essential actions that will support the project in achieving credits. The credits build on this foundation, leading to successful zero waste programs.

CREDITS

The TRUE Rating System consists of 100 possible points distributed across categories and credits (see Scorecard section). The points are distributed across credit types, including planning-based, strategy-based, and performance-based credits. This distribution provides opportunities for projects to obtain points for planning-based efforts but also rewards projects for implementing initiatives and demonstrating impact reductions. Approximately 15% of the points are attributed to planning-based credits, 40% to strategy-based credits, and 30% to performance-based credits, with the remaining 15% associated with the Project Priority category.

The credits in the TRUE Rating System provide a flexible path toward achieving zero waste through a variety of strategies, best practices, and leadership recognition. Figure 2 provides an overview of the TRUE credit categories and associated prerequisites and credits.

Figure 2: TRUE Categories and Credits



Rating System Overview

CREDIT STRUCTURE

Each credit and its corresponding requirements are detailed using the following format:

Credit Category Title | Credit

XXx# **Credit Title** **# Points**

INTENT

Describes the objective or benefit of the credit.

REQUIREMENTS

Actions, Measures, or benchmarks a project must meet to achieve the credit.

SUBMITTAL DOCUMENTATION

Specifies what a project must submit to demonstrate compliance with the credit requirements. This documentation may include a policy or plan detailing specific criteria, calculations demonstrating a project's performance, or a narrative explaining procedures undertaken to meet the requirements.

GUIDANCE

Suggestions, practices, strategies, and resources that a project team can consider to fulfill the credit. The guidance section is not an extension of the mandatory requirements section; however, it does include additional insight into the requirements when applicable. Achieving points will be based solely on demonstrating the requirements are met through submittal documentation. The guidance and strategies listed in this section are not all-inclusive, and projects are encouraged to use creative site-specific solutions to meet the requirements of a credit.

ADAPTATIONS

Events: Provides guidance on how to adapt the prerequisite or credit to Event projects.

Construction: Provides guidance on how to adapt the prerequisite or credit to Construction projects.

RELATED CREDITS & RESOURCES

Related Credits: List of other credits or prerequisites within the rating system that may inform, benefit, or amplify the subject credit and vice versa.

Resources: Provides useful resources such as external websites and/or TRUE resources such as the Zero Waste Calculator and Supplementary Guidance

Rating System Overview

OPTIONS

Some credits involve options because there are multiple pathways to meet the intent of the credit. These options can be additive or discrete and are noted as such. Optionality within credits provides flexibility and choices for different project types to pursue more applicable credit options.

- If the options state "**AND**," then the points are awarded cumulatively and must all be pursued to achieve maximum points.
- If the options state "**OR**," then only one of the options may be pursued.
- If the options state "**AND/OR**," then the project may pursue any individual option or combine options to achieve more points.

PLAN AND IMPLEMENT

Some credits are structured as "Plan and Implement" or "Plan and/or Implement." This structure gives points for developing a plan to address the specific intent and further rewards projects that are able to implement the plan and show impact.

- If the credit states "**AND**," then the credit is additive, so projects are not required to pursue all points within the credit but must complete the "Plan" in order to unlock the points for "Implement."
- If the credit states "**AND/OR**," then the project may pursue any individual option or combine options to achieve more points. It is recommended that the project complete both the "Plan" and "Implement" options to maximize value, but if implementation has occurred prior to a plan, then the project does not need to pursue both options.

Scorecard

Number	Credit	Points
Fundamentals and Planning (FP)		7
FPp1	Establish Zero Waste Goal and Policy	P
FPc1	Engage Upper Management in Zero Waste Activities	2
FPc2	Establish a Zero Waste Manager	1
FPc3	Include a TRUE Advisor in Project	1
FPc4	Right-Size Collection	1
FPc5	Label Container and Collection Areas	1
FPc6	Engage Service Providers in Zero Waste Goals	1
Measurement and Analysis (MA)		7
MAp1	Standardize Waste Tracking System	P
MAp2	Conduct a Waste Audit	P
MAc1	Expand Material Tracking	1
MAc2	Implement Financial Data Tracking	1
MAc3	Conduct a Comprehensive Zero Waste Audit	1
MAc4	Analyze and Execute Waste Audit Findings	2
MAc5	Verify End of Use or Life	2

Scorecard

Number	Credit	Points
Sourcing and Circularity (SC)		16
SCp1	Develop a Purchasing Policy	P
SCc1	Develop Purchasing Resources	3
SCc2	Engage the Supply Chain	3
SCc3	Prevent and Reduce within the Supply Chain	3
SCc4	Purchase Consumables for Zero Waste	2
SCc5	Purchase Durable Goods for Zero Waste	1
SCc6	Advance Local Circularity	4
Reduction and Diversion (RD)		23
RDp1	Develop a Zero Waste Logistics Plan	P
RDc1	Reduce Hazardous Materials	3
RDc2	Divert Across the Points of Generation	7
RDc3	Facilitate On-Site Reuse	2
RDc4	Manage Organics	5
RDc5	Manage Universal Waste (Common Hazardous Waste)	2
RDc6	Reduce Contamination	4

Scorecard

Number	Credit	Points
Training and Education (TE)		11
TEp1	Conduct a Zero Waste Orientation	P
TEc1	Communicate Zero Waste Initiatives	1
TEc2	Train Personnel	3
TEc3	Engage Personnel	1
TEc4	Train Procurement Personnel	2
TEc5	Engage the Community	1
TEc6	Establish Local Partnerships	3
Performance and Impact (PI)		21
PIp1	Meet 90% Diversion Performance	P
PIp2	Evaluate Greenhouse Gas Emissions	P
PIc1	Excel in Zero Waste Diversion	5
PIc2	Prioritize Preferred Diversion Strategies	5
PIc3	Evaluate Material Emissions	2
PIc4	Calculate Transport Emissions	1
PIc5	Determine Zero Waste Financial Impact	2
PIc6	Identify Zero Waste Community Impact	1
PIc7	Minimize Waste Generation	5
Project Priority (PR)		15
PRc1–15	Innovation, Pilots, Regional, Project-Specific	15
Total		100



Haleon Nyon | TRUE Gold | Nyon, Vaud, Switzerland

Fundamentals and Planning

Fundamentals and Planning

CATEGORY OVERVIEW

An essential part of a zero waste program is establishing targets and outlining key actions for success. The Fundamentals and Planning category encompasses credits that serve as the foundation for successfully designing, implementing, and achieving zero waste outcomes. The prerequisite establishes a starting point through the development of a Zero Waste Goal and Policy. The series of credits supports the identification and development of subject matter expertise and helps establish project commitment, ownership, and accountability.

The category also ensures that a project has a strong basis for waste collection within the project boundary to ensure proper infrastructure, reduce contamination, and provide education. By engaging service providers, the project can establish clear expectations and goals once materials leave the project. Employing zero waste fundamentals serves as a strong starting point on TRUE's roadmap to zero waste.

CLOSING THE LOOP

The category is key to a successful zero waste program as it establishes the priorities from the start of the zero waste program and encourages the initiative to come from the top down in an organization. Increasing circularity requires shifting the mindset away from our existing linear system. By establishing clear goals and leadership, the project has a foundation to drive changes in material usage and waste generation.

DECARBONIZATION

Establishing a Zero Waste Goal and Policy not only supports waste reduction and diversion from landfill but also impacts the greenhouse gas emissions associated with material usage, transportation, and end-of-life management. By setting targets and conducting upfront planning, projects can successfully reduce emissions across the value chain.

BUSINESS TRANSFORMATION

The Fundamentals and Planning category brings subject matter expertise and focus to the zero waste program. By creating a role centered around the zero waste program and understanding TRUE principles, the project will have clear guidance for execution. By developing a goal, the zero waste program and associated policies can be communicated across the organization and its supply chain, setting the foundation for success.

Fundamentals and Planning

Number	Credit	Points
FPp1	Establish Zero Waste Goal and Policy	P
FPc1	Engage Upper Management in Zero Waste Activities	2
FPc2	Establish a Zero Waste Manager	1
FPc3	Include a TRUE Advisor in Project	1
FPc4	Right-Size Collection	1
FPc5	Label Container and Collection Areas	1
FPc6	Engage Service Providers in Zero Waste Goals	1

Fundamentals and Planning | Prerequisite 1

FPp1 Establish Zero Waste Goal and Policy

Required

INTENT

To establish guiding principles and policies needed to successfully achieve zero waste as an operational goal.

REQUIREMENTS

Develop and adopt a Zero Waste Goal and Policy. The document must contain, at a minimum, the following:

- Project's zero waste goal(s) organized in alignment with the Zero Waste International Alliance's definition of Zero Waste and according to the Zero Waste Hierarchy.
- Metrics to track progress toward goal(s) and strategies that guide the achievement of the project's zero waste goal(s).

SUBMITTAL DOCUMENTATION

- Narrative detailing the process for developing the Zero Waste Goal and Policy.
- Copy of the project's Zero Waste Goal and Policy.

GUIDANCE

- Consider including short- and long-term goals and associated policies and commitments. While policies should focus on waste generated within the project boundary, reduction of downstream impacts can also be considered.
- When developing metrics, consider setting targets for reduction, reuse, recycling, and organics management and determining how performance can be measured over time.
- As a best practice, include internal processes and timelines for incorporating continued evaluation, feedback, and improvement.
- The Zero Waste Goal and Policy is intended to be evergreen, so evaluate it periodically to support continuous improvement in the zero waste program.

ADAPTATIONS

Events: A company-level Zero Waste Policy can be used if it specifies the inclusion of events.

Construction: A company-level Zero Waste Policy can be used if it specifies the inclusion of construction and renovation projects.

Fundamentals and Planning | Prerequisite 1

RELATED CREDITS & RESOURCES

FPc1: Engage Upper Management in Zero Waste Activities

SCp1: Develop a Purchasing Policy

RDp1: Develop a Zero Waste Logistics Plan

Zero Waste International Alliance

Fundamentals and Planning | Credit 1

FPc1 Engage Upper Management in Zero Waste Activities

1–2 Points

INTENT

To ensure upper management is committed to engaging in zero waste activities as a means of motivation, amplification, and identification of economic opportunities.

REQUIREMENTS

Pursue Option 1 and/or Option 2 for a maximum of 2 points.

Option 1: Zero Waste Goal and Policy Commitment by Upper Management — 1 Point

Upper management formally commits to the Zero Waste Goal and Policy developed in **FPp1: Establish Zero Waste Goal and Policy** and commits to achieving zero waste for the project.

AND/OR

Option 2: Review Quarterly Diversion Activities with Upper Management — 1 Point

Establish quarterly reviews of zero waste activities with upper management, such as initiatives, quantifiable savings, and revenue generation from zero waste activities.

SUBMITTAL DOCUMENTATION

Option 1:

- Narrative describing how the adoption of the Zero Waste Goal and Policy by upper management was communicated to personnel and relevant stakeholders. Include the names and titles of the upper management personnel.
- Copy of a memo or other formal record of upper management's adoption of and commitment to the Zero Waste Goal and Policy, restating the goals, policies, commitments, and expectations.

Option 2:

- Narrative describing upper management's review process for zero waste activities. Include the names and titles of the upper management personnel.
- Copy of four quarterly reports from the 12-month reporting period generated for upper management or any communications relaying quarterly diversion activities (e.g., emails, presentations, or meeting minutes).

Fundamentals and Planning | Credit 1

GUIDANCE

Option 1:

- Discuss with upper management current initiatives, challenges, and opportunities for achieving zero waste and determine additional support needed.
- Collaborate with upper management to communicate the commitment to the Zero Waste Goal and Policy to relevant personnel through memos, press releases, emails, or other methods.

Option 2:

- Develop a quarterly review and feedback process on zero waste. Determine the appropriate forum and format for reviewing zero waste activities, such as quarterly meetings, briefings, memos, or status documents.
- Consider including zero waste program updates such as recent successes, upcoming opportunities, recognition, and resource needs.

ADAPTATIONS

Events: For Option 2, the activities must be reviewed at least once during the event reporting period.

Construction: For Option 2, the activities must be reviewed at least once during the construction reporting period.

RELATED CREDITS

FPp1: Establish Zero Waste Goal and Policy

MAp1: Standardize Waste Tracking System.

Fundamentals and Planning | Credit 2

FPc2 Establish a Zero Waste Manager

1 Point

INTENT

To ensure zero waste program accountability, continuity, and overall success.

REQUIREMENTS

- Develop a job description for a Zero Waste Manager role or series of roles (i.e., team) that includes, at a minimum, the following responsibilities:
  - » Zero waste program design, development, implementation, and outcome monitoring.
  - » Stakeholder engagement.
  - » Achieving goals established in the Zero Waste Goal and Policy.
  - » Personnel training on zero waste principles and practices, any program-specific training, and plans to stay current with industry changes (e.g., through webinars and continuing education units [CEUs]).
- Fill the Zero Waste Manager role(s) to oversee implementation of the Zero Waste Goal and Policy.

SUBMITTAL DOCUMENTATION

- Copy of the job description(s) used to fill the Zero Waste Manager role(s).
- Narrative describing who is fulfilling the Zero Waste Manager responsibilities, how the role(s) was filled (e.g., internal promotion, external hire, or consultant), hours per week allocated to the role(s), and a description of the accountability and reporting structure.

GUIDANCE

- As a best practice, establish the Zero Waste Manager role(s) early in the project or reporting period for success.
- Fill the role(s) through promotion, lateral assignment, assignment of additional responsibilities to existing role(s), a new hire, or a consultant. The role(s) can be established as a portion of existing role(s), such as a sustainability manager.
- The role(s) do not need to be titled "Zero Waste Manager," provided that the established requirements are covered.
- The Zero Waste Manager role(s) need not be full-time; however, the hours per week dedicated to program management should be proportionate to the size of the project/organization and the associated duties.

Fundamentals and Planning | Credit 2

RELATED CREDITS

FPp1: Establish Zero Waste Goal and Policy

FPc1: Engage Upper Management in Zero Waste Activities

TEc2: Train Personnel

Fundamentals and Planning | Credit 3

FPc3 Include a TRUE Advisor in Project

1 Point

INTENT

To gain an understanding of zero waste required for a TRUE project and to facilitate the application process for certification.

REQUIREMENTS

Include at least one principal participant on the TRUE project team who has earned the TRUE Advisor certificate.

SUBMITTAL DOCUMENTATION

- Narrative identifying the TRUE Advisor and describing their role in the TRUE project.
- Copy of the active TRUE Advisor certificate for one of the principal participants.

GUIDANCE

- Select an individual who has or would like to obtain the TRUE Advisor certificate.
- As a best practice, select this individual early in the process to position the project for success.
- For an individual who is not currently certified, arrange for them to complete the TRUE Advisor course modules and take the TRUE Advisor exam to earn their TRUE Advisor certificate.
- A Zero Waste Manager established under FPc2 can also be the TRUE Advisor but is not required to be.

RESOURCES

TRUE Advisor Certification

Fundamentals and Planning | Credit 4

FPc4 Right-Size Collection

1 Point

INTENT

To ensure that container volume, quantity, and pickup frequency for each material type are appropriate for material generation.

REQUIREMENTS

- Evaluate all containers to ensure that appropriate sizes and pickup schedules are in place.
- Implement corrective actions as needed based on the evaluation.
- Develop a strategy to perform this review annually and make necessary adjustments with service provider(s) as appropriate.

SUBMITTAL DOCUMENTATION

- Narrative describing different material types collected, how containers were right-sized, and the periodic review methodology.
- Documentation showing adjustments in service frequency (such as amended contracts or agreements, change orders, or written requests), or documentation (such as before-and-after photographs and calculations) demonstrating that containers are sized appropriately.

Fundamentals and Planning | Credit 4

GUIDANCE

- Use methods such as certified weight tickets and physical observations of the containers prior to hauling to evaluate the weight and volume.
- Consider the period of time the evaluation should cover to adequately address temporal variations in material generation and pickup schedules.
- Work with service providers such as haulers and/or recovery facilities to identify strategies for right-sizing and cost-saving opportunities.
    - » Take into consideration generation rates, building occupancy, and building type.

Consider calculating cost savings if pursuing **MAc2: Implement Financial Data Tracking**.

ADAPTATIONS

Events: The review does not need to be performed annually but must be performed at the start of the event project, at a minimum.

Construction: The review does not need to be performed annually but must be performed at the start of the construction project, at a minimum.

RELATED CREDITS

MAc2: Implement Financial Data Tracking

RDp1: Develop a Zero Waste Logistics Plan

Fundamentals and Planning | Credit 5

FPc5 Label Container and Collection Areas

1 Point

INTENT

To minimize contamination and increase diversion by ensuring collection areas and receptacles have proper signage.

REQUIREMENTS

For all collection areas and receptacles:

- Clearly and consistently label and identify all receptacles for collecting recyclables, compostables, landfill material, and other diversion methods as applicable.
- Provide guidance identifying which material types are accepted in each diversion receptacle.
- Provide navigational and educational signage for locations where materials are collected and stored.

SUBMITTAL DOCUMENTATION

- Narrative describing the approach to labeling, including how material type collection areas are designated and the approach to directional and educational signage.
- Representative photographs of container and/or collection area labeling.
- Documentation substantiating that the photographs provided are representative of all containers and collection areas within the project, such as a labeled floor plan or map. Note: The floor plan or site map submitted under Required Project Information may be used.

Fundamentals and Planning | Credit 5

GUIDANCE

- Communicate the required contents for containers through photographs, symbols, and text to boost understanding of proper disposal. When text is used, consider using multiple languages if applicable to the project.
- Increase user understanding of the materials management system and benefits through posters and signs in appropriate places (e.g., break rooms, cafeterias).
- Provide locational and directional signage identifying specific areas or rooms dedicated to collection, repair, or safe storage based on material type.
- Collection areas and receptacles include all locations and containers used for waste handling within the project boundary. These can include, but are not limited to, trash, recycling, and compost bins throughout the facility, individual bins at workstations, larger collection containers in a manufacturing space, compactors, dumpsters, and other containers.
- For projects within a tenant space, provide labels and signage for containers and bins within the project's control. For containers and bins outside of the project's control or those located in communal or shared areas, work with the building owner, building management, and/or other tenants, where possible. Document efforts to coordinate with other parties to achieve requirements.

RELATED CREDITS & RESOURCES

RDp1: Develop a Zero Waste Logistics Plan

MAc1: Expand Material Tracking

Recycle Across America

Fundamentals and Planning | Credit 6

FPc6 Engage Service Providers in Zero Waste Goals

1 Point

INTENT

To incentivize all parties to reduce waste through solid waste collection agreements.

REQUIREMENTS

- Review collection agreements with all service providers handling waste and reusable/recyclable/compostable materials, including waste haulers, janitorial services, and other parties.
- Identify and implement modification(s) to at least one agreement that incentivizes the reduction of waste to landfill, incineration and/or WtE.

SUBMITTAL DOCUMENTATION

- Narrative listing all service provider agreements, the review process undertaken, and the resulting change(s) to service under at least one service provider agreement.
- Documentation demonstrating adjustment(s) made to service provider agreement(s) (such as amendments, change orders, or written requests).

Fundamentals and Planning | Credit 6

GUIDANCE

Work with the service provider(s) to identify opportunities for improvement that align with the Zero Waste Goal and Policy. Examples include, but are not limited to, the following:

- Include debagging recyclables in the janitorial staff scope of work.
- Include compost management in the janitorial scope of work or in the existing hauler agreement.
- Establish a profit-sharing model from the sale of recyclables with a service provider.
- Modify contract values to fluctuate based on the volume and/or weight of materials hauled from the site.
- Compare available material recovery facilities (MRFs) to identify those with higher recovery rates and discuss contract opportunities.
- For tenant spaces, consider incorporating waste-specific requirements in green lease language.

ADAPTATIONS

Events: Agreement modifications can be compared to agreements used in previous events or to the initial agreement from the service provider. Include written documentation showing that the modification(s) were made based on collaboration with the service provider(s).

Construction: Agreement modifications can be compared to agreements used in previous construction projects or to the initial agreement from the service provider. Include written documentation showing that the modification(s) were made based on collaboration with the service provider(s).

RELATED CREDITS

FPp1: Establish Zero Waste Goal and Policy



Stradivarius | TRUE Platinum | Barcelona, Spain | Photo: Stradivarius

Measurement and Analysis

Measurement and Analysis

CATEGORY OVERVIEW

The Measurement and Analysis category is an integral part of understanding waste, maximizing diversion, and achieving financial and material savings. An essential part of the TRUE framework is having a thorough comprehension of the project's waste: sources of generation, material makeup, contamination rates, and financial impact. The prerequisites and credits in this category provide guidance on how to develop detailed data tracking methods and how to conduct a **Waste Audit** and **Zero Waste Audit** to better understand material flows. Additional guidance can be found in **Supplementary Guidance** and the **Zero Waste Calculator**.

Understanding contamination rates is an essential step in ensuring that diversion is maximized and that materials go to the anticipated end-of-life outlet. In 2018, over 53% of the waste going to landfills in the United States was recyclable materials and over 30% was organic materials.[6] Recycling often has contamination rates of approximately 15%.

This category will assist project teams in establishing a consistent picture of material usage, waste generation, and costs, allowing them to see trends, identify issues, and evaluate opportunities for diversion and reduction.

CLOSING THE LOOP

By tracking and analyzing waste data and material types, project teams will have the necessary information to evaluate opportunities to keep materials in use. Understanding the materials, generation rates, and contamination issues is key for identifying ways to increase circularity.

DECARBONIZATION

The Measurement and Analysis category assists in decarbonization planning by supporting projects in tracking the end of life of materials, which allows for more accurate greenhouse gas emission calculations. Understanding sources of waste generation and waste data provides valuable insight into the material types that are driving emissions.

[6] Environmental Protection Agency. Facts and Figures about Materials Waste and Recycling. Last Updated December 2025. *epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials*

Measurement and Analysis

BUSINESS TRANSFORMATION

The Measurement and Analysis category prerequisites and credits are essential to small- and large-scale transformation. By building upon the standard waste tracking system, project teams will get a full picture of waste volumes and financial impacts, which will be key to developing business cases for reduction opportunities. The audit, contamination analysis, and end-of-use verification can identify challenges both on-site and externally.

Number	Credit	Points
MAp1	Standardize Waste Tracking System	P
MAp2	Conduct a Waste Audit	P
MAc1	Expand Material Tracking	1
MAc2	Implement Financial Data Tracking	1
MAc3	Conduct a Comprehensive Zero Waste Audit	1
MAc4	Analyze and Execute Waste Audit Findings	2
MAc5	Verify End of Use or Life	2

Measurement and Analysis | Prerequisite 1

MAp1 Standardize Waste Tracking System

Required

INTENT

To establish internal processes for effectively capturing waste data within the project boundary.

REQUIREMENTS

- Use the **Zero Waste Calculator** as a standardized tracking system for waste data that tracks the following on a monthly basis:
  - » Material type.
  - » Amount of waste and units.
  - » Outlet/hauler.
  - » End-of-life method.
- Populate the **Zero Waste Calculator** with at least 12 consecutive months of waste data. The 12-month reporting period must be consecutive and end no later than 120 days before submittal for certification.
- Develop an internal process for documenting the waste on an ongoing basis, including roles and responsibilities for inputting the data.

SUBMITTAL DOCUMENTATION

- **Zero Waste Calculator** with at least 12 consecutive months of waste data.
- Narrative describing:
  - » The internal process for tracking waste data on an ongoing basis, including roles and responsibilities for inputting the data.
  - » The methodologies and calculations used to determine weight estimates, including volume-to-weight conversion factors and calculations, intermittent and non-standard waste, and reduction and reuse quantities.
- Documentation substantiating the amounts reported in the tracking system for at least one month, such as invoices that document weight, weight tickets, or any report from the service provider (if available).
- In the instance that external documentation is not available, internal documentation may be used to verify values listed in the tracking system at the discretion of Green Business Certification Inc. (GBCI). Internal documentation must include daily photographs of material weights if using actual values.

Measurement and Analysis | Prerequisite 1

GUIDANCE

- Use the provided **Zero Waste Calculator** to populate the materials based on diversion method. Include all disposed materials, including those that go to landfill or incineration.
- Develop a method for calculating the amount of waste and units for material types that are reduced or reused. Use prior data before the materials were reduced or reused as a comparison to understand the amount of waste diverted. For more information, review the **Supplementary Guidance**.
- If weight is not available for a material type, use the guidance in the **Supplementary Guidance** to estimate the weight based on available data. Document the methodology in the calculator.
- For materials disposed of intermittently or when data is not provided monthly, follow the guidance in the **Supplementary Guidance** on how to estimate monthly data.

ADAPTATIONS

Events: The reporting period must be the length of the event, including setup and takedown.

Construction: The reporting period is the length of the construction project.

RESOURCES

Supplementary Guidance

Zero Waste Calculator

Measurement and Analysis | Prerequisite 2

MAp2 Conduct a Waste Audit

Required

INTENT

To understand waste generation, sorting processes, contamination, and opportunities for improvement.

REQUIREMENTS

- Conduct a **Waste Audit** using on-site personnel or a third party. The audit must:
  - Be completed within 24 months prior to the end of the reporting period.
  - Include a physical separation of materials for all waste materials generated in the project boundary.
  - Represent waste generated during one typical shift or day at a minimum.
  - Segregate materials into categories based on the source of waste generation and makeup of the material type and determine weights of all materials.
- Using the **Waste Audit** results:
  - Calculate the contamination rates of each end-of-life method (e.g., recycling, compost, and landfill).
  - Identify the top three (3) material types by weight in each end-of-life method. This data will be used to establish thresholds for subsequent credits.
  - Identify opportunities to reduce or divert the top three (3) material types in each end-of-life method.

SUBMITTAL DOCUMENTATION

- Narrative describing the **Waste Audit**, including:
  - Process or procedure for conducting the audit, including any physical or digital tools, platforms, methodology, etc.
  - Description of the team that conducted the audit.
  - Date(s) that the audit was conducted on.
  - Findings from the audit.
  - Contamination rates.
  - Identified opportunities for improvement.
- If sampling of waste was necessary, provide documentation indicating why sampling was required and the methodology employed to demonstrate the sample was representative of typical waste generation.
- Top three (3) material types categorized by end-of-life method.
- Photographs of the in-progress **Waste Audit**.

Measurement and Analysis | Prerequisite 2

GUIDANCE

- The **Waste Audit** will be used throughout the rating system to identify issues, determine zero waste opportunities, and estimate impact. Consider building upon this audit with **MAc3: Conduct a Comprehensive Zero Waste Audit** to maximize points and zero waste performance.
- Follow the recommended procedure for conducting a physical **Waste Audit** in the **Supplementary Guidance**.
- Sort the waste into distinct categories based on the makeup of the materials evaluated and document the categories. Weigh the total amounts of waste from each category and document them.
- If necessary, sampling of the waste is permissible. See **Supplementary Guidance** for additional guidance on sampling.
- If using a digital tool or platform, the process must include a physical layout of the materials and a narrative describing the methodology.
- For all projects, including events and construction, it is best practice to conduct the **Waste Audit** prior to or early in the reporting period to identify issues and determine opportunities for improvement.

ADAPTATIONS

Events: The **Waste Audit** must be conducted within the event reporting period.

Construction: The **Waste Audit** must be conducted within the construction project reporting period.

RELATED CREDITS & RESOURCES

MAc3: Conduct a Comprehensive Zero Waste Audit

Supplementary Guidance

Zero Waste Calculator

Measurement and Analysis | Credit 1

MAc1 Expand Material Tracking

1 Point

INTENT

To expand granularity and insight into waste data and increase understanding of waste impact.

REQUIREMENTS

Build upon the standard tracking method developed for **MAp1: Standardize Waste Tracking System** to expand the waste-related data tracked each month. Specifically:

- Identify at least one (1) material type for which monthly data can be broken out into at least two (2) subcategories that will provide beneficial granularity in understanding and managing generated waste. Use the **Zero Waste Calculator** to include the additional detailed waste data.
- The data must be provided for a minimum of three (3) months of the 12-month reporting period.

SUBMITTAL DOCUMENTATION

- **Zero Waste Calculator** with at least one (1) material type split into at least two (2) more granular subcategories. The more granular subcategories must have at least three (3) months of data populated in the 12-month reporting period.
- Narrative describing:
  - » The internal process for tracking additional material-type waste data.
  - » The methodologies and calculations used to determine weight estimates, including volume-to-weight conversions, intermittent and non-standard waste, and reduction and reuse quantities.
- Documentation substantiating the additional waste amounts reported in the tracking system (e.g., hauler reports/invoices, tracking logs, and **Waste Audit** results) for at least one (1) month.

Measurement and Analysis | Credit 1

GUIDANCE

- Use the data in the **Zero Waste Calculator** and the results of the **Waste Audit** to identify large and/or impactful material types.
- Evaluate if granular data would be beneficial to understand waste generation and opportunities for reduction.
- The material type(s) do not need to be physically separated to apply. The granular data can be separated and tracked using estimates from a **Waste Audit**, information from the service provider, or other methods.
- Example scenarios where additional tracking granularity would be beneficial:
  - » Based on discussions with a service provider, a project team learns that they may be able to get rebates for their cardboard recycling if they have enough volume and can separate the material. The team uses the **Waste Audit** results to split the single-stream recycling into two categories: cardboard and mixed recycling (plastics, aluminum, glass, etc.) to understand total volume and trends.
  - » A manufacturing project has a diverted material type of mixed specialty plastics that are rejected from the production process. All of the plastic is currently being tracked as one line in the **Zero Waste Calculator**, but the project wants to understand the impact of zero waste initiatives on each type of plastic. They split the tracking into three types of plastic to improve data accuracy and the impact of their work.

RELATED CREDITS & RESOURCES

MAp1: Standardize Waste Tracking System

MAp2: Conduct a Waste Audit

Zero Waste Calculator

Measurement and Analysis | Credit 2

MAc2 Implement Financial Data Tracking

1 Point

INTENT

To better understand the financial costs associated with diversion and disposal and explore opportunities for savings.

REQUIREMENTS

Build upon the **Zero Waste Calculator** data developed for **MAp1: Standardize Waste Tracking System** to track financial data. Track the cost data for each diverted and disposed material type.

- Provide the total cost and revenue of disposal, including rebates for each material type, including hauling, tipping, and other service fees in the**Zero Waste Calculator**.
- Update the internal process to reflect the additional data tracking.
- The data must be provided for a minimum of three (3) months of the 12-month reporting period.

SUBMITTAL DOCUMENTATION

- **Zero Waste Calculator** with at least one (1) material type split into at least two (2) more granular subcategories. The more granular subcategories must have at least three (3) months of data populated in the 12-month reporting period.
- Narrative describing:
  - » The internal process for tracking additional material-type waste data.
  - » The methodologies and calculations used to determine weight estimates, including volume-to-weight conversions, intermittent and non-standard waste, and reduction and reuse quantities.
- Documentation substantiating the additional waste amounts reported in the tracking system (e.g., hauler reports/invoices, tracking logs, and **Waste Audit** results) for at least one (1) month.

Measurement and Analysis | Credit 2

GUIDANCE

- Coordinate with appropriate personnel such as accounting, procurement, operations, or office management to understand billing for each diverted and disposed material type and the costs.
- Use the **Zero Waste Calculator** to track costs, identify high-impact waste, and evaluate trends.
- Utilize this data to communicate zero waste successes and opportunities in situations such as quarterly reports to upper management, personnel engagement, and training.
- Consider tracking or estimating the cost savings from reuse and reduction efforts.

ADAPTATIONS

Events: The data must be provided for the entire event.

Construction: The data must be provided for at least three (3) months. If the project is less than three (3) months, provide data for the entire project.

RELATED CREDITS & RESOURCES

MAp1: Standardize Waste Tracking System

Zero Waste Calculator

Measurement and Analysis | Credit 3

MAc3 Conduct A Comprehensive Zero Waste Audit

1 Point

INTENT

To build upon the **Waste Audit** to identify opportunities to reduce waste generation.

REQUIREMENTS

- Complete a **Comprehensive Zero Waste Audit** that evaluates all materials that enter the project boundary and waste that is generated at each of the Points of Generation. The audit must be completed within 24 months prior to the end of the reporting period.
- Identify the top three (3) material types (by weight or volume) that are being generated from each applicable **Point of Generation**.
- Note: A physical separation of materials is not needed at each Point of Generation. The results of the **Waste Audit** can be used to track materials to the source along with visual inspections of bins, review of purchases, etc. See **Supplementary Guidance** for more details.
- Evaluate how to reduce or divert each material type, starting with actions that can be taken upstream during the procurement process, followed by actions within the project boundary, and then downstream through service providers.
  - » If a material type is already being diverted, determine if a diversion method higher on the Zero Waste Hierarchy can be applied.
- Develop a report that summarizes the **Zero Waste Audit**, key findings by Point of Generation, and opportunities to reduce or divert the three (3) material types at each Point of Generation. For each opportunity, document if the action is upstream, in the project boundary, downstream, or a combination.

SUBMITTAL DOCUMENTATION

- Narrative describing the **Zero Waste Audit**, including:
  - » Description of the audit methodology.
  - » Description of the team that conducted the audit.
  - » Date(s) that the audit was conducted on.
- Photographs documenting the **Zero Waste Audit**.
- A **Zero Waste Audi**t Report that includes:
  - » Top three (3) materials by Point of Generation.
  - » Findings from the audit.
  - » Identified opportunities for improvement per material at each Point of Generation.

Measurement and Analysis | Credit 3

GUIDANCE

- For additional guidance and recommended procedures for conducting a **Zero Waste Audit** and determining Points of Generation, refer to the **Supplementary Guidance**.
- The **Zero Waste Audit** can be done either simultaneously with or separate from **MAp2: Conduct a Waste Audit**.
- Best practices for a **Zero Waste Audit** include, but are not limited to:
  - » At each applicable Point of Generation, conduct interviews to understand current waste procedures and gaps.
  - » Review the existing bins and conduct a visual inspection to understand bins with high contamination rates.
  - » Review any existing signage or educational materials in each area.
  - » Based on findings, identify best practices for zero waste, opportunities for improvement, and gaps across the project.
  - » Review opportunities with key personnel at each Point of Generation and procurement personnel to evaluate next steps.
- To evaluate opportunities for reduction or diversion, consider how the material flows through the project boundary, starting from the procurement process. Examples of potential opportunities upstream, in the project boundary, or downstream can include, but are not limited to:
  - » Upstream
    - Work with a supplier to switch to reusable packaging.
    - Switch from purchasing single-use items to reusables.
    - Order items in bulk and palletize for reduced packaging.
  - » In the Project Boundary
    - Increase and/or modify bin labels and signage to guide personnel on proper collection and disposal.
    - Install a baler so that plastic film can be collected, compacted, and sent to a recycler.
    - Conduct training on sorting and debagging recycling.
  - » Downstream
    - Work with available organics facilities to implement an organics collection program at the project to reduce contamination and divert waste from landfill to compost.
    - Evaluate if durable waste materials or products can be donated.
- Determine if manufacturing waste can be used as a feedstock at another facility.

Measurement and Analysis | Credit 3

ADAPTATIONS

Events: Estimate the top three (3) materials (by weight or volume) resulting in waste generation at the event. Evaluate how to divert or reduce each material as part of the report.

Construction: Estimate the top three (3) materials (by weight or volume) resulting in waste generation at the construction project. Evaluate how to divert or reduce each material as part of the report.

RELATED CREDITS & RESOURCES

MAp2: Conduct a Waste Audit

RDc2: Divert Across the Points of Generation

Supplementary Guidance

Measurement and Analysis | Credit 4

MAc4 Analyze and Execute Waste Audit Findings

1–2 points

INTENT

To quantify and implement opportunities from the **Waste Audit(s)**.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 2 points.

Plan: Analyze Results of Waste Audit — **1 Point**

- Analyze the results from **MAp2: Conduct a Waste Audit** and, if applicable, **MAc3: Conduct a Comprehensive Zero Waste Audit** to quantify the reduction and diversion opportunities identified during the **Waste Audit**. Calculate the estimated waste reduction or diversion potential of at least five (5) opportunities identified.
- If **MAc3: Conduct a Comprehensive Zero Waste Audit** was completed, the identified opportunities can come from either audit. Create an action plan for implementation for each of the five (5) opportunities. The action plan must include steps for implementation, responsible parties, and estimated timelines.

AND

Implement: Realize Opportunity — **1 Point**

- Based on the quantified opportunities and action plans, implement at least one opportunity prior to the end of the reporting period.

SUBMITTAL DOCUMENTATION

Plan:

- A minimum of five (5) opportunities quantified with estimated annual weight savings.
- Narrative describing any additional calculations or estimates required.
- A copy of the opportunity action plan for opportunity implementation.

Implement:

- Documentation demonstrating implementation of at least one opportunity, such as photographs, **Zero Waste Calculator**, process or procedure changes, or meeting minutes.

Measurement and Analysis | Credit 4

GUIDANCE

Plan:

- Evaluate the opportunities identified by material type in **MAp2: Conduct a Waste Audit** or by Point of Generation in **MAc3: Conduct a Comprehensive Zero Waste Audit** and determine the five (5) opportunities to quantify. Consider choosing the opportunities to quantify based on factors such as highest waste impact, highest cost impact, or availability of data.
- To estimate the potential waste reduction or diversion for each opportunity, follow the example steps or use an alternative methodology:
  - » Identify the material(s) impacted and the amount weighed or estimated during the **Waste Audit** or **Zero Waste Audit**.
  - » Evaluate if all the waste can be diverted or reduced or only a portion.
  - » Identify which material type would be impacted and the total annual amount of that material type from the **Zero Waste Calculator**.
  - » Use the amount of waste weighed during the audit and the total annual amount of that material type to estimate the total annual impact of the opportunity. If applicable, account for what percentage of the waste this impacts.
  - » If available, estimate the financial impact of reducing or diverting the waste using the procurement data in **MAc2: Implement Financial Data Tracking**.
- The following scenario goes through example calculations and development of an action plan.
  - » During an office **Waste Audit**, the project team identified that single-use coffee cups were a large portion of the waste and an opportunity to divert materials.
  - » The team weighed the coffee cups in the waste going to landfill and determined coffee cups totaled 5 lbs. The **Waste Audit** also found that total waste to landfill was 100 lbs, meaning that coffee cups represented 5% of the waste to landfill on a typical day.
  - » Using the **Zero Waste Calculator**, the team identified that there is about 25,000 lbs of waste going to landfill annually. Assuming that coffee cups are usually 5% of the waste, they estimated that approximately 1,250 lbs of coffee cups are going to landfill each year.
  - » By switching to reusable coffee cups or alternative options, the project team could divert an additional 1,250 lbs of material annually.
  - » Using the financial data in **MAc2**, the team estimates that the cost to send waste to landfill is about $70 per ton or $0.035 per lb. By diverting 1,250 lbs annually, the team estimates that they will save $43.75 in waste disposal costs.
  - » To estimate the material savings, the team first estimates the number of coffee cups disposed of annually. If each coffee cup weighs 0.5 oz, then the site purchases approximately 40,000 coffee cups annually.

Measurement and Analysis | Credit 4

  - » The team works with the procurement team to determine that the coffee cups cost about $0.10 per cup. Annually, the project is spending $4,000 on coffee cups.
  - » With the cost of disposal, the project is spending about $4,043.75 per year on single-use coffee cups.
  - » The project team estimates that they can buy enough reusable cups for the office for about $1,000, resulting in a payback period of about 3 months. In the first year, the project will save $3,000 on coffee cups and $4,000 in subsequent years and divert 1,250 lbs of waste from landfill.
  - » For the action plan, the project team determines the following to successfully implement the change:
    - Procurement will purchase reusable cups in the next month.
    - Procurement will stop purchasing single-use cups immediately so the site can use up the remaining single-use cups available.
    - The Zero Waste team will communicate the change to personnel, including updating signs, updating training, and including the change in the next quarterly communication in the next month.
    - The Zero Waste team will provide educational signs in break rooms about washing the reusable cups in the next month.

Implement:

- Best practices for implementing an identified opportunity include, but are not limited to:
  - » Update any labels and signs for collection areas and receptacles reflecting any changes in disposal requirements.
  - » Include changes in personnel communications.
  - » Update personnel trainings to reflect the change in requirements.
  - » Document the actual savings compared to the estimated and communicate those to personnel and upper management.
  - » Evaluate any challenges during or after implementation and modify the change or educational materials accordingly.

ADAPTATIONS

Events: If the opportunity cannot be implemented during the event, develop the action plan to implement opportunities in the next event, if recurring, or in a different event in the future.

Construction: If the opportunity cannot be implemented during the construction project, develop the action plan to implement in the next construction project.

Measurement and Analysis | Credit 4

RELATED CREDITS & RESOURCES

MAp2: Conduct a Waste Audit

MAc3: Conduct a Comprehensive Zero Waste Audit

Zero Waste Calculator

Measurement and Analysis | Credit 5

MAc5 Verify End of Use or Life

1–2 points

INTENT

To ensure that waste is being properly diverted at end of life or use and encourage transparency for service providers.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 2 points.

Plan: Engage Service Providers — 1 Point

- Review agreements for at least two (2) diverted material types to determine current contractual end-of-life requirements.
  - » These two (2) material types must be selected from the top three (3) material types identified in **MAp2: Conduct a Waste Audit** or the top three (3) materials per Point of Generation identified in **MAc3: Conduct a Comprehensive Zero Waste Audit**.
- Reach out to the waste service providers (e.g., haulers or vendors) associated with these agreements to engage service providers to ensure the materials go to the appropriate outlets.
- If the service providers do not respond, document attempted communication.

AND

Implement: Confirm End of Life — 1 Point

For at least two (2) diverted material types identified under Plan:

- Confirm the diversion path through to final end of life, including any intermediate stops, such as transfer stations.
- Document the final end-market location and method for a minimum of three (3) months of the 12-month reporting period per material type. Transfer stations do not qualify as final end-market locations.
- During the evaluation, if any material types are identified as being directed to incorrect outlets or disposed of via landfill, WtE, or incineration, develop an action plan with the vendor that:
  - » Identifies the material type(s), current issue(s), and associated cause(s) such as contamination, outlet issues, or contractual terms.
  - » Includes strategies to resolve the issue(s), actionable next steps, responsible parties, and timelines for resolution.

Measurement and Analysis | Credit 5

SUBMITTAL DOCUMENTATION

Plan:

- Narrative with overview of two (2) diverted materials evaluated.
- Documentation with the description and record of the discussions or communication attempts with the waste service providers.

Implement:

- Documentation validating the diversion path, including intermediate steps and final end-of-life for the material types, representing one (1) month of the 12-month reporting period per material type, such as waste tickets, certificates of destruction, reports, memos, or other methods from the vendors.
- Action plan for any material types not going to intended outlet(s), if applicable, including the next steps, responsible parties, and established timelines.

GUIDANCE

Plan:

- Work with procurement, finance, or other relevant departments to review material types and existing contracts with service providers.
- Develop a plan for engagement that includes the purpose for the confirmation, the need for three months of documentation, and how the request relates to the project's zero waste goals.
- Contact service providers with the request to verify the diversion path of the chosen materials. Maintain a record of the contact attempts.

Implement:

- Discuss with the service provider contacts the current path of the material once it leaves the project boundary and ensure all steps the materials may take before the final end market are accounted for, such as transfer stations, and confirm alignment with the existing contract. Consider interviewing key personnel such as drivers that may have more detailed knowledge of how materials are managed after they leave the project. Maintain a record of conversations or meetings.
- If contract terms for diversion are not being met, discuss any issues or concerns such as contamination with the provider. If contamination issues are present, request documentation such as photographs or waste tickets. Confirm the final disposal method for contaminated loads. Work with internal stakeholders and the waste vendor to develop an action plan to address any issues. Ensure that a timeline is specified and that clear next steps are documented, both internally and externally.

Measurement and Analysis | Credit 5

RELATED CREDITS

MAp2: Conduct a Waste Audit

MAc3: Conduct a Comprehensive Zero Waste Audit

MAc4: Analyze and Execute Waste Audit Findings



State Farm Insurance MRSF | TRUE Silver | Bloomington, Illinois, U.S.

Sourcing and Circularity

Sourcing and Circularity

CATEGORY OVERVIEW

The circular economy captures the benefits of materials throughout their life span and seeks to keep them in circulation as long as possible. A circular economy is the opposite of a linear economy—the standard "take, make, dispose" model of production—and it represents an unprecedented opportunity to reduce costs, embodied carbon, and strain on natural resources and ecosystems.

According to the Circularity Gap Report, as of 2025, only 6.9% of the global economy is circular, declining from 9.1% in 2018. Between 2016 and 2021, 582 billion metric tons of materials were consumed globally—almost as much as the 740 billion metric tons consumed during the entire 20th century.[7] At the same time, waste generation continues to increase, with global waste projected to grow to 3.8 billion metric tons per year by 2050.

This category aims to address these issues and provide opportunities to advance the circular economy within the project boundary. The Circularity Gap Report estimates that we can meet the needs of all people with a third of the materials used today, highlighting the enormous impact that circularity can have. Developing the Purchasing Policy as a prerequisite is a building block to reducing impact in the supply chain by prioritizing products that support circularity and zero waste. The credits support the implementation of the Purchasing Policy and encourage supplier engagement to move to reduced or alternative materials.

CLOSING THE LOOP

The Sourcing and Circularity category has a direct impact on closing the loop. The intent of this category is to work upstream to reduce material usage, preserve natural resources, and address waste before it reaches the project boundary.

DECARBONIZATION

Reducing material and packaging use or using less impactful materials reduces the upstream carbon emissions before the materials enter the project boundary. The Ellen MacArthur Foundation anticipates that the circular economy can address the 45% of global emissions that the energy transition will not impact.[8]

[7] Circularity Gap Report 2025. 2025. *pdf.circularity-gap.world/?report=CGR_Global_2025_Complete_document_a3edd17a1b&referer=/report/2025/cgr-2025-overview&page=1*

[8] hdl.handle.net/10986/30317

Sourcing and Circularity

BUSINESS TRANSFORMATION

This category highlights business transformation by creating partnerships with vendors and local parties that can work together to find solutions. The strategies present an opportunity for financial savings for both the upstream vendors and the project and allow for innovative strategies to reduce impact.

Number	Credit	Points
SCp1	Develop a Purchasing Policy	P
SCc1	Develop Purchasing Resources	3
SCc2	Engage the Supply Chain	3
SCc3	Prevent and Reduce within the Supply Chain	3
SCc4	Purchase Consumables for Zero Waste	2
SCc5	Purchase Durable Goods for Zero Waste	1
SCc6	Advance Local Circularity	4

Sourcing and Circularity | Prerequisite 1

SCp1 Develop a Purchasing Policy

Required

INTENT

To develop a Zero Waste Purchasing Policy to drive and support change upstream in the supply chain and to identify the top purchases and suppliers for impactful credit achievement elsewhere in the TRUE Rating System.

REQUIREMENTS

- Develop and adopt a project-specific or corporate-wide Purchasing Policy that outlines purchasing preferences that support the Zero Waste Hierarchy. At a minimum, the policy must include directives, considerations, and internal processes for applying each of the diversion strategies (Rethink, Reduce, Reuse, Recycle, and Compost) to purchases.

SUBMITTAL DOCUMENTATION

- Narrative describing process for developing the Purchasing Policy.
- Copy of the Purchasing Policy.
- Memorandum or other document demonstrating adoption of the Purchasing Policy.

GUIDANCE

- Work with procurement personnel to review and revise current purchasing policies to include zero waste directives. If no purchasing policy is in place, examine current procedures and how zero waste purchasing directives can be incorporated to develop one. The project can come up with additional environmentally preferable directives but must include the minimum directives referenced in Requirements.
- When developing purchasing directives, consider creative guidance that would result in purchases that support strategies higher on the hierarchy that could serve the same purpose.
- Consider guidance such as avoiding unnecessary overages, purchasing used and/or remanufactured goods instead of new, renting instead of buying, purchasing durable (not disposable) goods, and/or goods with post-consumer recycled content.

Sourcing and Circularity | Prerequisite 1

ADAPTATIONS

Events: A company-wide purchasing policy may be used if events and event-specific materials are included.

Construction: A company-wide purchasing policy may be used if construction and construction-specific materials are included.

RELATED CREDITS & RESOURCES

SCc1: Develop Purchasing Resources

SCc4: Purchase Consumables for Zero Waste

SCc5: Purchase Durable Goods for Zero Waste

Responsible Purchasing Network

Introduction to Ecolabels and Standards for Greener Products

Sourcing and Circularity | Credit 1

SCc1 Develop Purchasing Resources

1–3 Points

INTENT

To facilitate implementation and improve outcomes of the Purchasing Policy.

REQUIREMENTS

Develop resources that assist procurement personnel in successfully implementing the Purchasing Policy from **SCp1: Develop a Purchasing Policy**.

Pursue Option 1 or Option 2 for a maximum of 3 points.

Option 1: Vendor List or Decision Tree — 1 Point

- Develop a list of suppliers that meet the Purchasing Policy preferences for key ongoing consumable and durable product types.
- Alternatively, develop a new or customize an existing purchasing decision tree that guides procurement personnel through the internal process of selecting products that align with the Purchasing Policy preferences.

OR

Option 2: Procurement Tool — 3 Points

Develop a new digital tool or software, or customize an existing one, that, at a minimum:

- Is populated with commonly purchased products (and alternatives) organized by product type category.
- Allows filtering by Purchasing Policy preferences.

SUBMITTAL DOCUMENTATION

Option 1:

- Narrative describing the process for developing the resource and describing the functionality of the resource.
- Copy of the vendor list and/or the decision tree.

Option 2:

- Narrative describing the process for developing the procurement tool and describing the functionality of the tool.
- Copy of the procurement tool (alternatively provide screenshots and filters/search functionality).

Sourcing and Circularity | Credit 1

GUIDANCE

Option 1:

- Key consumable and durable product types are dependent on the project. Key product types can be based on frequency of purchase, overall spend, total amount, or project impact.
- Consider what questions or choices should be incorporated into the decision tree that result in a clear pathway to inform purchases that result in preferred zero waste outcomes.
- Consider including additional factors, such as cost thresholds and availability/lead time.

Option 2:

- Narrative describing the process for developing the procurement tool and describing the functionality of the tool.
- Copy of the procurement tool (alternatively provide screenshots and filters/search functionality).

ADAPTATIONS

Events: Corporate-level or company-wide resources may be used if events and event-specific materials are included.

Construction: Corporate-level or company-wide resources may be used if construction and construction-specific materials are included.

RELATED CREDITS

SCp1: Develop a Purchasing Policy

Sourcing and Circularity | Credit 2

SCc2 Engage the Supply Chain

1–3 Points

INTENT

To promote zero waste in the supply chain by preventing waste before it enters the project.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 3 points.

Plan: Develop Supplier Engagement Plan — **1 Point**

- Develop an engagement plan to communicate zero waste goals and purchasing preferences to material/product suppliers.

AND

Implement: Engage Suppliers — **1–2 Points**

- Identify one or more key material/product suppliers for engagement.
- Engage with one or more key material/product suppliers to communicate the project's zero waste goals and purchasing preferences.
- Collaborate with suppliers to explore opportunities for waste prevention and reduction in the supply chain.

Points are awarded according to the following table.

Number of Suppliers Engaged	Points
1	1
2+	2

Sourcing and Circularity | Credit 2

SUBMITTAL DOCUMENTATION

Plan:

- Narrative describing supply chain engagement strategy and communication plan.
- A copy of the plan to engage and communicate with suppliers.

Implement:

- Narrative describing the engagement and potential strategies discussed (e.g., waste reduction, waste diversion, potential cost savings).
- Narrative describing why the supplier(s) were chosen for engagement and why they are impactful to the project.
- Documentation of engagement or communication such as policies, presentations, brochures, newsletters, emails, letters, supplier documentation, or other methods that demonstrate engagement. NOTE: Any sensitive supplier information can be redacted from documentation.

GUIDANCE

- Key suppliers are dependent on the project. Key product types can be based on frequency of engagement, overall spend, total amount purchased, or project impact.
- Collaborate with procurement personnel to develop an appropriate engagement plan for the identified suppliers.
- Consider how to incorporate the key points of the Purchasing Policy, zero waste goals, and the impact of suppliers on the goals in the engagement plan.
- Topics in the engagement plan can include, but are not limited to:
  - » Alternative products that meet the Purchasing Policy
  - » Takeback programs
  - » Packaging reduction initiatives
  - » Preferred certifications
- Engagement options include, but are not limited to, individual or group meetings, trainings, and questionnaires.
- Consider how to establish ongoing engagement and dialogue with suppliers to continue to evaluate new initiatives.
- Evaluate how zero waste can be incorporated into ongoing communications, contracts, or other established channels.

Sourcing and Circularity | Credit 2

RELATED CREDITS

SCp1: Develop a Purchasing Policy

SCc3: Prevent and Reduce within the Supply Chain

Sourcing and Circularity | Credit 3

SCc3 Prevent and Reduce Within the Supply Chain

1–3 Points

INTENT

To implement zero waste principles identified in the Purchasing Policy and change behavior in the supply chain.

REQUIREMENTS

- Identify at least one (1) key material/product supplier to implement changes.
- Implement at least one (1) change with one (1) key material/product supplier that is in alignment with the zero waste goals within 24 months prior to the end of the reporting period.
- Estimate the annual impact of the change(s) on material purchasing totals and/or potential waste generation.
- Communicate success and savings with the supplier(s) to demonstrate the impact the changes have on the zero waste goals.

Points are awarded according to the following table.

Number of Suppliers with Implemented Changes	Points
1	1
2	2
3	3

SUBMITTAL DOCUMENTATION

- Narrative describing changes made with supplier(s), the impact on materials and waste, and the estimation methodology.
- Narrative describing why the supplier(s) were chosen for collaboration and why they are impactful to the project.
- Documentation verifying the change, such as contracts, written documentation, meeting minutes, or other methods. NOTE: Any sensitive supplier information can be redacted from documentation.
- Documentation communicating the impact of the change(s) with the supplier(s), such as meeting minutes, written documentation, or other methods. NOTE: Any sensitive supplier information can be redacted from documentation.

Sourcing and Circularity | Credit 3

GUIDANCE

- Key suppliers are dependent on the project. Key product types can be based on frequency of engagement, overall spend, total amount purchased, or project impact.
- Leverage the engagement with priority suppliers established under **SCc2: Engage the Supply Chain** or otherwise to implement at least one change or strategy on a zero waste initiative.
- Examples of potential strategies for reducing materials include, but are not limited to, implementing a take-back program, using recyclable or reusable materials, or reducing packaging.
- Calculate or estimate the impact.
    - » For example, engagement with a supplier results in a new packaging solution that is lighter, recyclable, and less expensive to ship and procure. The project purchases 500 units throughout the year. The new package type is 200 grams lighter than the previous package. As a result, the project reduces its waste by 100,000 grams (100 kilograms) per year. Additionally, the new packages have a reduced shipping cost of $10 per unit due to reduced size and weight. This saves the project $5,000 a year on shipping.
- In addition to estimating the impact of material purchasing and waste generation, consider calculating the financial impact of the change(s).
- Consider how the strategy can be expanded over time. For example, if the strategy implemented can only impact a percentage of total material purchased from the supplier at this time, evaluate how it can be implemented across more of the material in the future for increased impact.

ADAPTATIONS

Events: The impact of the change(s) on material purchasing totals and/or potential waste generation can be estimated for the length of the event.

Construction: The impact of the change(s) on material purchasing totals and/or potential waste generation can be estimated for the length of the construction project

RELATED CREDITS

SCp1: Develop a Purchasing Policy

SCc2: Engage the Supply Chain

Sourcing and Circularity | Credit 4

SCc4 Purchase Consumables for Zero Waste

1–2 Points

INTENT

To implement purchasing of consumable products that align with the Purchasing Policy preferences and more broadly support circularity and zero waste outcomes.

REQUIREMENTS

Demonstrate effective implementation of applicable Purchasing Policy requirements by purchasing ongoing consumable products that meet one (1) or more of the following options:

Pursue Option 1 and/or Option 2 for a maximum of 2 points.

Option 1: Post-Consumer Recycled Paper — 1 Point

- At least 50% of office and janitorial paper products purchased contain a minimum of 50% post-consumer recycled content during a consecutive three-month period within the 12-month reporting period. Percent purchased is based on total cost of product type.

AND/OR

Option 2: Recycled Content or Compostable/Biodegradable — 1 Point

- Identify a top ongoing consumable product or material purchased.
- At least 50% of one other product type purchased contains a minimum of 50% post-consumer recycled content or is 100% compostable/biodegradable during a consecutive three-month period within the 12-month reporting period. Percent purchased is based on total cost of product type.

SUBMITTAL DOCUMENTATION

- Narrative describing why the consumable product or material was chosen and why it is impactful to the project.
- Copy of invoices (minimum one per product) from procurement demonstrating that the minimum quantities (by cost) are met for each of the options attempted.
- Documentation supporting each product claimed under each of the attempted options such as third-party certification(s), conformance with national or international standards, contracts, and/or purchase orders.

Sourcing and Circularity | Credit 4

GUIDANCE

- See the glossary for meanings of **Post-Consumer Material** and **Consumable**.
- A top consumable product or material is an ongoing purchase that can be determined by frequency of purchase, amount purchased, total spend, or other impacts.
- Ensure changes to purchasing ongoing consumable products are standardized through strategies such as training procurement personnel on the requirement(s) and developing template contracts or agreements.
- Additionally, work to ensure suppliers understand the requirements when setting up new contracts. If purchasing eligible products has been ongoing, provide information supporting the practices.
- As a best practice, require third-party certifications for recycled content and compostable/biodegradable materials. Consider requiring that certifications are based on International Organization for Standardization (ISO) 14021 standards and definitions or equivalent.
- Products purchased to achieve this credit may also qualify for points under **SCc6: Advance Local Circularity**.

RELATED CREDITS & RESOURCES

SCp1: Develop a Purchasing Policy

SCc6: Advance Local Circularity

Biodegradable Products Institute (BPI)

Sourcing and Circularity | Credit 5

SCc5 Purchase Durable Goods for Zero Waste

1 Point

INTENT

To implement purchasing of durable products that align with the Purchasing Policy preference for reuse and more broadly support circularity and zero waste outcomes.

REQUIREMENTS

- Identify a top durable material or product purchased.
- Demonstrate that at least 25% of one (1) product type is reused, repurposed, refurbished, or remanufactured. Percent purchased is based on total cost, weight, volume, or quantity of the product type.
- The 25% purchased must be within the last 24 months prior to the end of the reporting period.

SUBMITTAL DOCUMENTATION

- Narrative describing why the durable material or product was chosen and why it is impactful to the project.
- Calculations and copies of invoices or receipts (with dates) from procurement demonstrating that the minimum quantity (by cost, weight, or volume) is met.
- Documentation supporting the claim that the product is refurbished or remanufactured, such as third-party certification(s), conformance with national or international standards, contracts, and/or purchase orders. For repurposed or reused products, provide photographs or other evidence demonstrating the products were sourced from reuse suppliers.

Sourcing and Circularity | Credit 5

GUIDANCE

- Ongoing durable product types include long-lasting products that are routinely purchased such as electronics, furniture, appliances, equipment, and machinery. These product purchases are often due to growth in personnel, facility/operations expansion, or scheduled updates. The frequency of purchase can be regular (every 3 months) or intermittent (occasionally throughout the year as needed).
- A top durable product or material can be determined through frequency of purchase, amount purchased, total spend, or other impacts.
- Ensure purchasing requirement(s) are ongoing and consistent through strategies such as training procurement personnel on incorporating requirement(s) into contracts or agreements and on available resources for identifying products that meet the requirements, such as any developed in **SCc1: Develop Purchasing Resources**.
- Additionally, work to ensure suppliers understand the requirements when setting up new contracts. If purchasing eligible products has been ongoing, provide information supporting the practices.
- Example
  - » Two months before the reporting period, the project had to upgrade all office chairs. They worked with an external vendor to evaluate if some chairs could be refurbished instead of being replaced. The vendor determined that approximately half of the chairs could be refurbished and upgraded, meeting the 25% threshold.
- Example by cost
  - » To purchase all new chairs, the project would have to spend $100,000. By refurbishing half of them, they spent $50,000 on new chairs and $30,000 on refurbishment, resulting in $80,000 total.
  - » The refurbished office chairs represented 37.5% of the total cost spent, demonstrating that the project met the 25% threshold.

$$\frac{\$30{,}000}{\$80{,}000} \times 100 = 37.5\%$$

- Products purchased to achieve this credit may also qualify for points under **SCc6: Advance Local Circularity**.

RELATED CREDITS

SCp1: Develop a Purchasing Policy

SCc1: Develop Purchasing Resources

SCc6: Advance Local Circularity

Sourcing and Circularity | Credit 6

SCc6 Advance Local Circularity

2–4 Points

INTENT

To advance the **local** circular economy by supporting local reuse, recycling, or upcycling markets through the project's outgoing material types and/or purchases.

REQUIREMENTS

Identify and implement a process that advances a circular economy through:

Pursue Option 1 or Option 2 or Option 3 for a maximum of 4 points.

Option 1: Increase Supply — 2 Points

- Demonstrate that at least 25% (by weight or volume) of one (1) material type generated at the project's site is collected through source separation and directed to **local** reuse, recycling, or composting outlets for a minimum of three (3) months during the reporting period.

OR

Option 2: Increase Demand — 2 Points

- Purchase at least 25% (by weight, volume, or cost) of one (1) product type from **local** reuse, composting, recycling, or upcycling outlets for a minimum of three (3) months during the reporting period.

OR

Option 3: Supply and Demand — 4 Points

- Achieve Options 1 and 2 where the **local** destination and source are the same outlet/facility for a minimum of three (3) months during the reporting period.
- The materials or products purchased in Option 2 do not need to be made from the same waste materials sent to the outlet in Option 1 but need to come from the same outlet and process that take the waste materials as feedstock.

Sourcing and Circularity | Credit 6

SUBMITTAL DOCUMENTATION

Options 1 and 3:

- Narrative describing why the material type was chosen and why it is impactful to the project.
- Narrative describing the local reuse, recycling, or upcycling outlet and an overview of the diversion practices.
- Data specifying the type and amount (weight or volume) of material directed to local use.
- Documentation verifying the arrangement with local companies or organizations such as contracts, official agreements, receipts, or invoices.
- Documentation verifying that the outlet is local (within 100 miles or 161 kilometers).

Options 2 and 3:

- Narrative describing why the material type was chosen and why it is impactful to the project.
- Narrative describing the local reuse, recycling, or upcycling outlet and an overview of the diversion practices.
- Data specifying the type and annual amount (weight, volume, or cost) of materials purchased locally.
- Documentation verifying the arrangement with local companies or organizations such as contracts, official agreements, receipts, or invoices.
- Documentation verifying that the outlet is local (within 100 miles or 161 kilometers).

Sourcing and Circularity | Credit 6

GUIDANCE

- Assess opportunities in **local** markets for reuse, recycling, or upcycling of materials generated within the project boundary or that can be purchased for your site.
- Projects may generate materials that can serve as feedstock for a locally produced product or material. Waste materials or products could similarly support local reuse markets through donation or sale.
- Explore establishing agreements with the **local** companies or organizations that provide these services.
- **Local** qualifies as any source within 100 miles (161 kilometers) of the project (as measured by travel distance on a map).
- Examples of increasing supply and/or demand include, but are not limited to:
  - » Supply: Directing yard waste from the project to a **local** organics facility that makes compost.
  - » Demand: Purchasing compost from a **local** organics composter to amend soil on the project.
  - » Supply and Demand: Directing yard waste to the same **local** organics facility that compost is in turn purchased from and applying it at the project to amend soil.
  - » For Option 3, if there are multiple intermediate stops within the process, ensure they are all **local** to qualify. For example, if the product can only be purchased from a distributor or if an intermediate processor must be involved, confirm that all parties are **local** and document the chain of custody of the material.
- Products purchased to achieve this credit may also qualify for points under **SCc4: Purchase Consumables for Zero Waste** or **SCc5: Purchase Durable Goods for Zero Waste**.

RELATED CREDITS

MAp2: Conduct a Waste Audit

MAc3: Conduct a Comprehensive Zero Waste Audit

SCp1: Develop a Purchasing Policy

SCc4: Purchase Consumables for Zero Waste

SCc5: Purchase Durable Goods for Zero Waste



Taylor Farms | TRUE Platinum | Salinas, CA, U.S.

Reduction and Diversion

Reduction and Diversion

CATEGORY OVERVIEW

The Zero Waste Hierarchy is a guiding principle to divert waste from landfill and incineration through the highest and best method possible.[4] The goal of a zero waste program is to divert waste utilizing the strategies on the hierarchy and seek continuous improvement by moving materials up the hierarchy toward redesign and reduction. The hierarchy aims to extend the life of materials while reducing the amount of reprocessing needed between uses. The Reduction and Diversion category encourages projects to implement strategies that focus on the top of the hierarchy.

Globally, only 19% of municipal solid waste is recycled, while 30% is landfilled and 13% goes to WtE. The remaining 38% of waste is uncontrolled, meaning it is either not collected or is dumped or burned outside of standard landfills or incinerators.[1] These statistics show that proper collection and diversion, both within the project boundary and downstream, are imperative. This category starts with the Zero Waste Logistics prerequisite, ensuring that there is a formal materials management plan for internal use and service providers. The following credits build on the strategies identified in the Measurement and Analysis category and the Zero Waste Hierarchy, working to divert materials through the highest point on the hierarchy.

CLOSING THE LOOP

The Reduction and Diversion category provides actionable strategies to promote and advance a closed-loop system. The credits support diverting materials from landfill and incineration to more circular practices on the hierarchy. While reduction and reuse are the ultimate goal for many materials, the credits support collecting and managing recyclables and organic materials for proper diversion.

DECARBONIZATION

The Zero Waste Hierarchy and the credits in this category result in decarbonization by reducing materials or using alternatives that have a lower impact throughout the value chain. By reducing waste or identifying better management strategies to keep materials in use, there will be a lower demand for virgin materials. Ensuring that materials such as organics are properly managed at end of life reduces methane emissions, a powerful greenhouse gas.

BUSINESS TRANSFORMATION

The strategies implemented in this category avoid the costs of disposal by turning waste into an asset. Collecting and diverting materials can result in income or reduced disposal costs. The category promotes working locally, supporting the community and economy, as well as reducing hazardous materials, which have a higher risk of human impact.

Reduction and Diversion

Number	Credit	Points
RDp1	Develop a Zero Waste Logistics Plan	P
RDc1	Reduce Hazardous Materials	3
RDc2	Divert Across the Points of Generation	7
RDc3	Facilitate On-Site Reuse	2
RDc4	Manage Organics	5
RDc5	Manage Universal Waste (Common Hazardous Waste)	2
RDc6	Reduce Contamination	4

Reduction and Diversion | Prerequisite 1

RDp1 Develop a Zero Waste Logistics Plan

Required

INTENT

To ensure that internal processes for separation, collection, and hauling are established and implemented to maximize zero waste outcomes.

REQUIREMENTS

Develop a Zero Waste Logistics Plan that provides clear direction to vendors, haulers, personnel, visitors, and contractors on materials management practices for the project. At a minimum, the document must include:

- Details on proper collection and handling of material types.
- Location of collection containers, storage areas, pickup areas, compactors, etc.
- Roles and responsibilities.
- Implementation strategy describing how the plan and details are incorporated into operations and communicated.

SUBMITTAL DOCUMENTATION

- A narrative describing the process for developing the Zero Waste Logistics Plan, including stakeholder involvement.
- A copy of the Zero Waste Logistics Plan that includes:
  - » Details on proper collection and handling of material types.
  - » Location of collection containers, storage areas, pickup areas, compactors, etc.
  - » Roles and responsibilities.
  - » Implementation strategy.

Reduction and Diversion | Prerequisite 1

GUIDANCE

- Collaborate with key stakeholders to develop a Zero Waste Logistics Plan and ensure requirements across all material types and Points of Generation are captured. Stakeholders can include, but are not limited to:
  - » Operations and/or facilities
  - » Janitorial
  - » Maintenance
  - » Procurement
- Consider existing challenges and opportunities that can be addressed through clear communication and roles laid out in the plan.
- Decide if labeled floor plans or other mapping of collection and hauling areas would be beneficial in the Logistics Plan.
- Consider establishing a frequency for periodic updates to the plan to address changes in the project and triggers for interim modifications.

RELATED CREDITS & RESOURCES

FPc4: Right-Size Collection

FPc5: Label Container and Collection Areas

TEc2: Train Personnel

Center for Zero Waste Design

Reduction and Diversion | Credit 1

RDc1 Reduce Hazardous Materials

1–3 Points

INTENT

To reduce or eliminate environmental, health, and safety risks to employees and communities in proximity to facility operations and where hazardous materials are developed/disposed of.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 3 points.

Plan: Develop Hazardous Material Reduction Plan — **1 Point**

- Develop a written plan that lists all hazardous materials, including universal waste and common hazardous waste, used in all project operations, and identifies strategies to reduce hazardous material and chemical use, replace them with non-toxic alternatives, or eliminate the need to use hazardous materials from the outset.

AND

Implement: Implement Hazardous Material Reduction — **1–2 Points**

- Earn additional points according to the following table by demonstrating reduction in total hazardous material use for a minimum of three (3) months.
- The reduction must be from an operational change, not due to the delay or deferment of actions or practices.
- The baseline period must be representative of typical operations, including intermittent practices and materials.

Points are awarded according to the following table.

Hazardous Waste Reduction (% by Weight)	Points
10%–19.9%	1
≥20%	2

SUBMITTAL DOCUMENTATION

Plan:

- A narrative describing development of the plan.
- A copy of the plan to reduce hazardous materials.

Reduction and Diversion | Credit 1

Implement:

- Data summarizing individual and overall hazardous material reduction quantities, demonstrating that the total reduction meets the thresholds, such as **Zero Waste Calculator** data, invoices, waste tickets, or other documentation.

GUIDANCE

- Research and consult within the sector to determine suitable non-hazardous solutions to the organization's needs.
- Opportunities for reduction can include replacing materials with non-hazardous options, such as cleaning supplies, or implementing a system to further process waste, such as aerosol can puncturing or solvent recovery.
- Consider opportunities to reduce common hazardous waste or universal waste, such as batteries, lamps, mercury-containing equipment, and aerosol cans.
- As a best practice for continuous improvement, consider reduction opportunities identified recently or implemented during the reporting period.
- Example
  - » A project determines it purchased 150 lbs of hazardous material over a typical three-month period prior to the reporting period. Through implementation of strategies identified in the reduction plan, the project determines that it purchased 100 lbs over a three-month period in the reporting period, resulting in a 33% reduction.

$$\textbf{Percent Reduction} = \frac{\textbf{Three-Month Baseline (Pre-reduction)} - \text{Three-Month Total (Post-reduction)}}{\text{Three-Month Baseline (Pre-reduction)}} \times 100$$

ADAPTATIONS

Events: The total hazardous materials can be compared with those from a previous event, if recurring, or with the original plan. Document what changes were made to the plan to reduce hazardous material usage.

Construction: The total hazardous materials can be compared with those from a previous construction project or with the original plan. Document what changes were made to the plan to reduce hazardous material usage.

Reduction and Diversion | Credit 1

RESOURCES

EPA Safer Choice

Zero Waste Calculator

Reduction and Diversion | Credit 2

RDc2 Divert Across the Points of Generation

1–7 Points

INTENT

To reduce impacts associated with inbound materials and reduce waste across the project's points of waste generation.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 7 points.

Plan: Review Points of Generation — **1 Point**

- Review all applicable Points of Generation within the project boundary for opportunities to reduce and divert materials.
- Identify the top material types disposed of by weight or volume (minimum of one (1)) at each **Point of Generation**. Identify at least one strategy per **Point of Generation** to reduce waste.

AND

Implement: Reduce and Divert Materials Across Points of Generation — **1–6 Points**

Implement strategies that result in a reduction or diversion of at least ten percent (10%) (by weight or volume) over a three (3)-month period for materials disposed of at each **Point of Generation** that have not been addressed through other credits, such as **SCc3: Prevent and Reduce within the Supply Chain, PIc2: Prioritize Preferred Diversion Strategies,** or **RDc4: Manage Organics.**

Points are awarded per material type according to the following table, for a maximum of 6 points.

Minimum Percent Reduced/Diverted Per Material Type	Points
10%	1
20%	2

Reduction and Diversion | Credit 2

SUBMITTAL DOCUMENTATION

Plan:

- Narrative describing the review of the Points of Generation. The narrative must include the top disposed materials at each **Point of Generation** (minimum of one (1) per point) and one (1) strategy for reduction for each **Point of Generation**.

Implement:

- Documentation showing the reduction(s) of each disposed material for each **Point of Generation**, such as the **Zero Waste Calculator** data, invoices, waste tickets, receipts, reports, photographs, or other documentation.
- A narrative describing strategies implemented to achieve the reductions.

Reduction and Diversion | Credit 2

GUIDANCE

- For more details on the **Points of Generation**, see **Supplementary Guidance**.
- Use the results of the **Waste Audit** and, if applicable, the **Zero Waste Audit**, to gain an understanding of diverted and disposed materials that can be linked to each Point of Generation.
- Coordinate with key personnel at each Point of Generation to understand frequently used materials, disposed and diverted materials, and challenges. Discuss any potential solutions to those challenges.
- Evaluate the current material use and collection setup at each Point of Generation to identify potential strategies for reduction and diversion.
- As a best practice for continuous improvement, consider reduction opportunities identified recently or implemented during the reporting period.
- Examples include, but are not limited to:
  - » Cafeteria: The project team identifies disposable dishware as a top disposed material. The project team is able to provide reusable dishware to personnel, reducing the need for disposable dishware by 60%, resulting in 2 points.
  - » Manufacturing: The project team identifies personal protective equipment (PPE) as a top disposed material. The team is able to implement laundered/reusable gowns, resulting in a 40% reduction in waste and earning 2 points.
  - » Office: The project team discovers that the majority of the recycling in the office space is being incorrectly put into landfill bins. The team increases signage, education, and personnel engagement to improve diversion. The efforts result in a 12% diversion from landfill, resulting in 1 point.

ADAPTATIONS

Events: The total reduction and diversion can be compared with those from a previous event, if recurring, or with the original plan. Document what changes were made to the plan to reduce or divert the material(s).

Construction: The total reduction and diversion can be compared with those from a previous construction project or with the original plan. Document what changes were made to the plan to reduce or divert the material(s).

Reduction and Diversion | Credit 2

RESOURCES

SCc3: Prevent and Reduce within the Supply Chain

PIc2: Prioritize Preferred Diversion Strategies

RDc4: Manage Organics

Supplementary Guidance

Zero Waste Calculator

Reduction and Diversion | Credit 3

RDc3 Facilitate On-Site Reuse

2 Points

INTENT

To support the use of durable and reusable materials within the project to help extend the embodied value of materials.

REQUIREMENTS

- Identify and implement at least one strategy that enables the reuse of materials within the project. Facilitate on-site reuse through an internal process change and/or infrastructure improvement. The strategies can be newly implemented or an improvement to an existing program.
- Develop and implement an awareness campaign for personnel associated with the implemented change(s).

SUBMITTAL DOCUMENTATION

- Narrative describing the facility improvements made to support on-site reuse and the awareness campaign associated with the implemented change(s).
- Documentation of any existing programs, including written policies, internal processes, or photographs.

GUIDANCE

- Determine what project or process improvements would need to be established or expanded to foster reuse within the facility.
- Review strategies implemented under **SCc3: Prevent and Reduce within the Supply Chain**, and/or **SCc5: Purchase Durable Goods for Zero Waste** and determine how these efforts can be supported with programming and physical change/space.
- Potential strategies for facilitating on-site reuse include, but are not limited to:
  - » Install a dishwasher to support reusable food service ware.
  - » Establish a program to reuse office supplies.
  - » Install drinking water filling stations for refilling reusable containers.
  - » Establish a cleaning and storage area for reusable pallets.

RELATED CREDITS

SCc3: Prevent and Reduce within the Supply Chain

SCc5: Purchase Durable Goods for Zero Waste

Reduction and Diversion | Credit 4

RDc4 Manage Organics

1–5 Points

INTENT

To manage organic matter to create valuable, nutrient-rich soil or for use by local communities through donation.

REQUIREMENTS

- Create a process for the collection of source-separated organics.
- Use an on-site compost system or identify and utilize an organics service provider for off-site management of organic materials.
- Organic materials can include food waste, compostable materials, organic scrap from production, yard waste, or other materials.
- If feasible, reuse the compost on-site for landscaping or other uses.
- Acceptable methods of organics management include:
  - » Compost
  - » Donation
  - » Animal Feed
  - » Anaerobic Digestion (with composting of residuals)

Points are awarded according to the following table. Combine options for a maximum of 5 points.

Option	Points
Manage Back-of-House Organic Waste (Generated by Food Preparation/Production/Distribution)	1
Manage Front-of-House Organic Waste (Generated by Personnel/Visitors)	1
Manage Other Organics/Compostables	1
Manage Yard Trimmings	1
Reuse Compost On-Site	1

Reduction and Diversion | Credit 4

SUBMITTAL DOCUMENTATION

- Narrative identifying the process for collection of source-separated organics and the organization(s) that are handling the composting of materials and a brief description of their process.
- Narrative describing how compost is reused on-site, if applicable.
- Photographs of the on-site collection system.
- Documentation verifying service for at least three (3) months, such as invoices or equivalent records from the service provider and compost facility.
- A contract or written confirmation demonstrating ongoing commitment to on-site compost practices.

GUIDANCE

- Sources of organic waste generation include, but are not limited to:
  - » Preparation of food, such as in a cafeteria or catering kitchen (back of house).
  - » Production of food, such as food manufacturing (back of house).
  - » Distribution of food, such as in a retail setting (e.g., grocery store), often from expired organics (back of house).
  - » Consumption of food by personnel or visitors, such as in lunch or break rooms (front of house).
  - » Compostable service ware, such as dishware, utensils, cups, and napkins.
- Work with the organics service provider to determine acceptable materials. If using or implementing compostable products or food service ware, confirm that the service provider can accept and process the materials.
- Include organics management processes in personnel training, container labeling and signage, and the Zero Waste Logistics Plan.

RELATED CREDITS

TEc2: Train Personnel

FPc5: Label Container and Collection Areas

RDp1: Develop a Zero Waste Logistics Plan

Reduction and Diversion | Credit 5

RDc5 Manage Universal Waste (Common Hazardous Waste) 1–2 Points

INTENT

To avoid negative environmental impacts from improper disposal of commonly generated hazardous waste.

REQUIREMENTS

Collect and properly dispose of commonly generated hazardous waste or universal waste, according to the Zero Waste Hierarchy.

Pursue Option 1 and Option 2 for a maximum of 2 points.

Option 1: On-Site Collection **1 Point**

Collect and properly dispose of all universal waste generated at the project.

AND

Option 2: Community Collection **1 Point**

Collect and properly dispose of universal waste from personnel and/or the local community.

SUBMITTAL DOCUMENTATION

Option 1:

- Narrative describing the waste generated at the project, what is collected (including that from personnel and the community if applicable), and how the materials are safely handled and disposed of.
- Documentation verifying waste hauling and processing, such as an agreement, contract, or other documentation proving proper disposal.
- Photographs of the collection system for the materials.

Option 2:

- Documentation verifying the collection, such as communications, signage, emails, or other materials for personnel and community collection.

Reduction and Diversion | Credit 5

GUIDANCE

- Common hazardous waste or universal waste can vary by jurisdiction or region. It can include, but is not limited to, electronic waste, fluorescent bulbs, mercury-containing equipment, and batteries.
- Review local requirements for storage, labeling, transport, and processing.
- Example strategies include:
  - » Work with IT to ensure electronic waste that cannot be reused is properly recycled.
  - » Set up a battery collection for employees and recycle or safely dispose of the batteries.
  - » Host a community-wide drive for electronic waste and batteries.
- As a best practice, work with specialized disposal vendor(s) to ensure that the materials are shipped to a qualified and permitted facility.

RESOURCES

epa.gov/hw/universal-waste

Reduction and Diversion | Credit 6

RDc6 Reduce Contamination

1–4 Points

INTENT

To properly divert as many materials as possible and minimize complications at end of life.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 4 points.

Plan: Develop Contamination Reduction Plan — **1 Point**

Identify three (3) contamination sources and develop a plan to reduce contamination for each.

AND

Implement: Reduce Contamination — **1–3 Points**

Implement the plan to reduce contamination for one (1) to three (3) of the material types, show a reduction in contamination during the reporting period compared to the previous **Waste Audit**, and document the strategies implemented to yield the reduction.

Points are awarded based on the following table:

Material Types with Reduced Contamination	Points
1	1
2	2
3+	3

Reduction and Diversion | Credit 6

SUBMITTAL DOCUMENTATION

Plan:

- Narrative describing why the three (3) material types were chosen and the impact on the project.
- Reduction plan for each of the three (3) material types.

Implement:

- Narrative describing implementation of the reduction plan.
- Documentation demonstrating:
  - » Strategies implemented to yield the reduction (e.g., signage, containers, or trainings).
  - » Evidence of reduced contamination such as results from a subsequent **Waste Audit** or new contamination rate data from the waste vendor.

Reduction and Diversion | Credit 6

GUIDANCE

- As a best practice, use the results of the **Waste Audit** to determine material types with high rates of contamination or coordinate with service providers to understand material types with ongoing contamination issues.
- Meaningful contamination reduction can be based on the overall percentage reduction in contamination, reduction in issues with service providers, increased diversion, or other methods.
- Potential strategies to include in the contamination reduction plan include, but are not limited to:
  - » Modify and/or increase signage regarding the material(s) and/or point(s) of generation
  - » Add restrictive lids to recycling containers to limit non-recyclable materials
  - » Address the issues in personnel training or communications
  - » Differentiate collection bins and bags by color
  - » Ensure recycling is debagged before final disposal in the project boundary
  - » Confirm acceptable materials with service providers
- To show a reduction in contamination, consider:
  - » Conduct a streamlined **Waste Audit** focused on the contaminated waste streams
  - » Review contamination at the **Point of Generation**
  - » Use documentation from service providers
  - » If using a digital tool or platform to measure the change in contamination, document the methodology used.
- Work with key stakeholders such as operations, janitorial, service providers, or other parties to implement changes needed to reduce contamination.

ADAPTATIONS

Events: The contamination reduction can be shown within the event period or compared to a previous event, if recurring.

Construction: The contamination reduction can be shown within the construction project period or compared to a previous project.

RELATED CREDITS

MAp2: Conduct a Waste Audit

MAc3: Conduct a Comprehensive Zero Waste Audit



Sanofi | TRUE Gold | Buenos Aires, Argentina | Photo: Sanofi

Training and Education

Training and Education

CATEGORY OVERVIEW

A zero waste program can only succeed with the support and involvement of all stakeholders. The Training and Education category provides strategies and guidance for projects to continuously promote the zero waste goals, policies, and procedures across an organization and the community. The World Bank strongly encourages behavior change to reach sustainable waste management, stating:

Successful waste management depends on stakeholder participation, social support, and a strong social contract with citizens.[9]

The prerequisites and credits emphasize the need for initial training for all personnel, as well as the benefits of ongoing education and communication to implement a successful zero waste program. Education, training, and engagement empower personnel to drive forward zero waste goals. This category also encourages projects to expand beyond the project boundary to the local community, expanding the zero waste impact.

CLOSING THE LOOP

By providing the training and education needed for stakeholders to understand zero waste, people become equipped with an awareness of circularity and the role it plays in reducing the impact on the natural world. This is critical as it allows for more ideas and solutions to be brought to the table for keeping materials and resources in use. Increasing engagement by employees and other stakeholders can lead to innovative circular strategies.

DECARBONIZATION

Zero waste plans need more than just policies and procedures to succeed; they need the buy-in and follow-through from all stakeholders. It is critical for personnel to understand the waste management procedures, segregation requirements, and the importance of contamination reduction in order to minimize waste, increase diversion, and ultimately reduce emissions.

[9] Ailin Tomio, Kremena M. Ionkova, and Silpa Kaza. Sustainable Waste Management through Behavioral Science: Case Studies around the World. World Bank. Published January 29, 2024. *blogs.worldbank.org/en/sustainablecities/sustainable-waste-management-through-behavioral-science-case-studies-around-world*

Training and Education

BUSINESS TRANSFORMATION

The Training and Education category is built on providing people of all roles and backgrounds with the knowledge and skills to reduce and divert waste. By providing continuous education to personnel, a project can have a significant impact on the culture of waste at both the project site and in the surrounding community. By interacting with the local community through events and partnerships, the project can continue to grow this impact and drive transformation.

Number	Credit	Points
TEp1	Conduct a Zero Waste Orientation	P
TEc1	Communicate Zero Waste Initiatives	1
TEc2	Train Personnel	3
TEc3	Engage Personnel	1
TEc4	Train Procurement Personnel	2
TEc5	Engage the Community	1
TEc6	Establish Local Partnerships	3

Training and Education | Prerequisite 1

TEp1 Conduct a Zero Waste Orientation

Required

INTENT

To ensure all personnel understand the zero waste goal and how their roles support the waste initiatives. To increase program engagement by promoting internal materials management and zero waste processes and policies.

REQUIREMENTS

Conduct a zero waste training as part of orientation for all new personnel, including employees, contractors, consultants, and vendors working at the facility. Training must provide an overview of the program, including:

- Zero waste goals identified in **FPp1: Establish Zero Waste Goal and Policy**.
- Zero Waste Logistics process from **RDp1: Develop a Zero Waste Logistics Plan**.
- The importance of zero waste.
- Proper internal processes for material collection and disposal at the facility.

SUBMITTAL DOCUMENTATION

- Narrative overview of how zero waste training is incorporated into orientation.
- Documentation used for zero waste training (presentations, brochures, guides, etc.).

GUIDANCE

- Work with personnel responsible for training new hires to discuss orientation programs and determine where and how the zero waste training can be incorporated into existing orientation activities.
- Reference the Zero Waste Goal and Policy, Purchasing Policy, Zero Waste Logistics Plan, and other zero waste documentation to incorporate procedures and best practices into the training.
- Consider including a tour of the project facility to review bins, signage, materials, and other key items.
- Consider establishing a frequency for periodic updates to the training.
- As a best practice for building owners or property managers, include all occupants in the building, including those in tenant spaces, in the training.

ADAPTATIONS

Events: Conduct the training prior to the event reporting period for all personnel.

Construction: Conduct the training prior to the construction reporting period for all personnel.

Training and Education | Prerequisite 1

RELATED CREDITS

FPp1: Establish Zero Waste Goal and Policy

FPc5: Label Container and Collection Areas

RDp1: Develop a Zero Waste Logistics Plan

Training and Education | Credit 1

TEc1 Communicate Zero Waste Initiatives

1 Point

INTENT

To increase program engagement through ongoing promotion of the zero waste program and continuous education.

REQUIREMENTS

Communicate with personnel about any zero waste program updates, successes, case studies, opportunities, or other related topics at least once per quarter.

SUBMITTAL DOCUMENTATION

- Narrative describing how zero waste information is communicated to employees each quarter. The narrative must describe the method for communications completed during the four (4) quarters in the 12-month reporting period.
- Documentation of communications or activities for the four (4) quarters in the 12-month reporting period. Documentation may include newsletters, presentations, brochures, photographs, emails, or other methods.

GUIDANCE

- Coordinate with upper management, HR, office management, communications, or other relevant departments to determine the best method of communication.
- Strategies can include newsletters, articles, tips of the month, bulletin board postings, workshops, and staff emails. This communication can be electronic, verbal, or visual.
- Take advantage of national days designated for sustainability (e.g., Earth Day, America Recycles Day, Zero Waste Week, and National Reuse Day) to hold zero waste events.
- Provide updates on zero waste initiatives to educate staff on zero waste successes and other areas of opportunity.

ADAPTATIONS

Events: Communicate with personnel about zero waste initiatives at least once during the event reporting period. Provide documentation for one communication, at a minimum.

Construction: Communicate with personnel about zero waste initiatives at least once during the construction reporting period. If construction is longer than one (1) quarter, communicate at least once per quarter. Provide documentation for all communications during the construction project.

Training and Education | Credit 2

TEc2 Train Personnel

1–3 Points

INTENT

To provide focused, continuing education to personnel in roles that have a high impact on the zero waste program.

REQUIREMENTS

Pursue Option 1 and/or Option 2 for a maximum of 3 points.

Option 1: Role-Specific Training

1 Point

- Develop role-specific zero waste training for at least two (2) key roles related to the materials management program, such as operations, janitorial, or office management. The training must include internal processes specific to the role or group and emphasize how the role is related to the program.

AND/OR

Option 2: All Personnel Training

1–2 Points

- Develop an annual training for all personnel. The training must include internal processes specific to different roles or groups. The training must cover the importance of the zero waste program, all internal materials management and zero waste processes, best practices, and facility-specific requirements.
- Require all personnel to take the annual training. Points are achieved based on participation rate for the 12-month reporting period according to the following table.

Participation Rate	Points
50%–79% Participation Rate	1
80%+ Participation Rate	2

SUBMITTAL DOCUMENTATION

All Options:

- Narrative describing the focus role(s) or group(s) for the training and their impact on the waste program. The narrative must include an overview of key topics included in the waste training and the process for annual updates.
- Documentation used for zero waste training (presentations, brochures, guides, etc.).

Training and Education | Credit 2

Option 2:

- Documentation showing the participation rate during the 12-month reporting period for the all-personnel training, such as a sign-in sheet, digital record, confirmation from HR, or other.

GUIDANCE

- Determine role(s) or group(s) that have a high impact on material generation, collection, and/or disposal. Examples include, but are not limited to, operations, manufacturing, janitorial, office management, and similar groups.
- Reference the Zero Waste Goal and Policy, Purchasing Policy, Zero Waste Logistics Plan, and other zero waste documentation to incorporate procedures and best practices into the training.
- Consider including a tour of the project facility to review bins, signage, materials, and other key items.
- Include specifics on waste disposal and sorting based on various Points of Generation with the materials that the personnel will interact with on an ongoing basis.
- To incentivize participation, consider making the training mandatory, incorporating it into personnel communications, creating department challenges, or conducting it as part of a full staff meeting.
- As a best practice, require or encourage personnel to retake the training or a refresher course annually to promote continuing education and provide reminders on policies and procedures.
- Consider updating the training annually to reflect any changes to the program or waste procedures relevant to the role(s).
- As a best practice for building owners or property managers, include all occupants in the building, including those in tenant spaces, in the training.

ADAPTATIONS

Events: Provide role-specific or all personnel training during the event reporting period. Training can be provided through written communications, meetings, or other methods. Provide documentation supporting training delivery.

Construction: Provide role-specific or all personnel training during the construction reporting period. Training can be provided through written communications, meetings, or other appropriate methods. Provide documentation supporting training delivery.

Training and Education | Credit 2

RELATED CREDITS

FPp1: Establish Zero Waste Goal and Policy

FPc5: Label Container and Collection Areas

RDp1: Develop a Zero Waste Logistics Plan

TEp1: Conduct a Zero Waste Orientation

Training and Education | Credit 3

TEc3 Engage Personnel

1 Point

INTENT

To increase engagement and incentivize zero waste performance.

REQUIREMENTS

- Implement a personnel engagement activity or program that incentivizes and rewards waste program participation and initiatives.
- The activity or program must have been conducted once at a minimum during the 12-month reporting period and must support zero waste goals.

SUBMITTAL DOCUMENTATION

- Narrative describing the zero waste activity or activities that were conducted within the 12-month reporting period.
- Documentation used for the activity, awards or rewards, such as newsletters, posters, brochures, photographs, copies of certifications, or other.

GUIDANCE

- Develop a facility-wide program that encourages participation in zero waste efforts. Strategies can include, but are not limited to, competitions, challenges, team-specific goals, workshops, or events.
- Consider implementing rewards for successful teams or personnel such as recognition, gift cards, or other incentives. Work with upper management to understand effective strategies based on the various teams.
- Take advantage of national days designated for sustainability (e.g., Earth Day, America Recycles Day, Zero Waste Week, and National Reuse Day) to hold zero waste activities.
- As a best practice, establish the activity or program as an ongoing activity.

ADAPTATIONS

Events: Implement an activity or program at least once during planning or during the event reporting period.

Construction: Implement an activity or program at least once during the construction reporting period.

Training and Education | Credit 4

TEc4 Train Procurement Personnel

1–2 Points

INTENT

To demonstrate commitment to the upstream reduction of waste and educate personnel to support goals.

REQUIREMENTS

- Conduct a training specific to the team responsible for procurement on zero waste.
- The training must include the impact of procurement and purchases on zero waste, how to identify products that satisfy the Purchasing Policy developed in **SCp1: Develop a Purchasing Policy**, tools for simplifying procurement, strategies for reducing waste from suppliers, and how to communicate goals with vendors.
- Points are achieved based on the percentage of procurement personnel trained in the 12-month reporting period according to the following table.

Percentage of Procurement Personnel	Points
50%–89.9%	1
≥90%	2

SUBMITTAL DOCUMENTATION

- Narrative describing an overview of the training and how procurement impacts waste in the facility. The narrative must include an overview of key topics included in the waste training.
- Documentation used for zero waste training, such as presentations, brochures, guides, or other.
- Documentation verifying the percentage of procurement personnel that took the training in the 12-month reporting period, such as an online tracker, a sign-in sheet, or other methods.

Training and Education | Credit 4

GUIDANCE

- Procurement personnel are any individuals or teams that are involved in purchasing, buying, or working with suppliers to source materials coming into the project boundary.
- Reference the Purchasing Policy, top suppliers, and top materials identified in **SCp1: Develop a Purchasing Policy** when developing the training.
- Include case studies, role-playing, or other methods to educate purchasing agents on how to communicate goals with vendors and incorporate strategies into contracts.
    - » If there are any current agreements with vendors that include waste reduction initiatives such as reusable packaging or takeback programs, highlight these as case studies.
- As a best practice, update the training at least once per year to reflect any changes in policies and procedures. Consider having employees retake the course each year or take a refresher training.

ADAPTATIONS

Events: Provide procurement personnel training during planning for the event or during the event reporting period. Company-wide or corporate-level training can apply if it covers event-specific topics and materials.

Construction: Provide procurement personnel training during planning and design or during the construction reporting period. Company-wide or corporate-level training can apply if it covers construction-specific topics and materials.

RELATED CREDITS

SCp1: Develop a Purchasing Policy

Training and Education | Credit 5

TEc5 Engage the Community

1 Point

INTENT

To encourage wider adoption of zero waste practices outside of the project and have a positive impact on the surrounding community.

REQUIREMENTS

Participate in or host an event or activity that promotes zero waste practices within the local community at least once annually. The event or activity must have occurred within the 12-month reporting period.

SUBMITTAL DOCUMENTATION

- Narrative describing the community event and the project's role in promoting zero waste activities, including an overview of the event, what zero waste initiatives were implemented, and how many project personnel were involved.
- Documentation showing project engagement with the community through photographs, flyers or promotional materials, official letters, press releases, or other.
- Documentation showing educational support for zero waste initiatives during the community event such as flyers or promotional materials, signage, press releases, photographs, or other methods.

Training and Education | Credit 5

GUIDANCE

- Engage with the local community through zero-waste-related events or by incorporating waste diversion within an event or activity.
- Examples of zero-waste-related events include local cleanups, hosting a material swap or donation drive, or educational workshops.
- Zero waste practices can also be incorporated into local community events such as festivals, races, activities, charity fundraisers, or other gatherings.
- Ensure project participation, including that of the leadership team, and provide educational support for zero waste initiatives through flyers or promotional materials, signage, press releases, or other methods.
- Supporting an event that achieves TRUE for events also satisfies this requirement.

ADAPTATIONS

Events: If the event involves the local community, document how the event promotes zero waste practices within the local community. If it is a private event, plan an engagement or activity with the local community related to the event. Consider activities that highlight the best practices used during the event, such as donation drives, upcycling workshops, or an educational session.

Construction: Conduct an event or activity during planning and design or during the construction reporting period. Consider activities that highlight the best practices during construction, such as information sessions, material drives, or other activities.

Training and Education | Credit 6

TEc6 Establish Local Partnerships

1–3 Points

INTENT

To increase waste diversion by working within the local community on new solutions.

REQUIREMENTS

Develop novel strategies that involve partnership(s) with a local business, facility, or group to advance zero waste and circularity and increase waste diversion within the project boundary. Points are awarded according to the following table.

Strategies	Points
1	1
2	2
3	3

SUBMITTAL DOCUMENTATION

- Narrative describing partnership and impact on zero waste goals and program.
- Narrative describing how the partnership will be ongoing or an explanation of why it was only a one-time occurrence.
- Documentation verifying the partnership such as contracts, invoices, waste tickets, or other.
- If applicable, documentation verifying agreement that the partnership will continue in the future, such as contracts, meeting notes, written communications, or other.

Training and Education | Credit 6

GUIDANCE

- A partnership involves one or more entities that work together to collectively advance zero waste and circularity by developing strategies that result in ongoing increased waste diversion within the project boundary. A partnership can result in more than one (1) strategy.
- The local entity that is part of the partnership does not need to be a new relationship, but the strategy to increase waste diversion cannot be pre-existing.
- Strategies can include, but are not limited to, combining a waste stream from multiple facilities to make diversion more economically or physically feasible, directing waste to a local manufacturer to use as feedstock, or developing a reuse system for waste materials from the facilities.
- Examples include, but are not limited to:
  - » The project team has excess fabric from their manufacturing process that is currently being sent to landfill. They identify a local group that will use fabric scraps for local community projects. They are able to set up a donation system to divert the materials.
  - » The project is purchasing new IT equipment. Instead of sending the e-waste to disposal or recycling, the project team sets up a donation with a local group to provide affordable, used electronics to the community.
  - » The project team does not have enough plastic film material to justify purchasing a baler. The project team is able to identify two local businesses in a similar situation, and their combined plastic film amounts would provide financial justification for a baler. The project team sets up a contract with the other businesses to purchase a baler, combine the material, and recycle the plastic film, resulting in two partnerships.
- Evaluate opportunities to work with equity-focused community partners and positively impact the community through the partnership.



Stradivarius | TRUE Platinum | Barcelona, Spain | Photo: Stradivarius

Performance and Impact

Performance and Impact

CATEGORY OVERVIEW

This category captures a core tenet of TRUE certification: the requirement for all projects to achieve a 90% diversion rate. The category also goes above and beyond the diversion rate to measure project performance for total generation, emissions, and financial impact. The Performance and Impact category provides a framework for evaluating a project with quantifiable and measurable data points. The prerequisites and credits provide metrics for the project to rate performance at the time of certification and to develop targets for improvement.

CLOSING THE LOOP

The Performance and Impact category gives project teams essential performance data that shows alignment with circularity principles. The diversion rate and intensity reduction track and reward materials that stay in use, reducing the need for virgin materials. Performance and Impact allows a project to quantify and report on circular strategies while also identifying areas for future improvement.

DECARBONIZATION

This category provides the methodology and tools to calculate the emissions impact of waste, including the waste disposal methods, materials impact, and transportation methods. By calculating the emissions impact, the project can identify the most impactful wastes, materials, and transport methods and create action plans for reduction. The emissions data provides valuable insights into focus areas for long-term decarbonization goals.

BUSINESS TRANSFORMATION

The Performance and Impact category highlights transformation by allowing projects to consistently calculate and report on overall diversion, reduction, and emissions. These key data points can be used externally to highlight successes and opportunities, which can open the door to expanded awareness, shared learnings, and partnerships.

Performance and Impact

Number	Credit	Points
PIp1	Meet 90% Diversion Performance	P
PIp2	Evaluate Greenhouse Gas Emissions	P
PIc1	Excel in Zero Waste Diversion	5
PIc2	Prioritize Preferred Diversion Strategies	5
PIc3	Evaluate Material Emissions	2
PIc4	Calculate Transport Emissions	1
PIc5	Determine Zero Waste Financial Impact	2
PIc6	Identify Zero Waste Community Impact	1
PIc7	Minimize Waste Generation	5

Performance and Impact | Prerequisite 1

PIp1 Meet 90% Diversion Performance

Required

INTENT

To ensure a minimum percentage (by weight) of waste material is diverted from landfill and incineration compared with the total weight of waste generated.

REQUIREMENTS

- Divert at least 90% of waste by weight during the 12-month reporting period. Use a combination of waste prevention, reuse, composting, recycling, or other forms of acceptable diversion to reach the 90% diversion threshold.
- The total contamination rate for all diverted materials must be lower than 10% for the 12-month reporting period.

SUBMITTAL DOCUMENTATION

- **Zero Waste Calculator** per requirements in **MAp1: Standardize Waste Tracking System** with diversion rate calculated for the 12-month reporting period.
- Documentation verifying that the contamination rate is 10% or below for diverted materials.

Performance and Impact | Prerequisite 1

GUIDANCE

- Review data captured in the **Zero Waste Calculator** and ensure all material types and data are entered, including reduction and reuse waste streams. Confirm that any non-standard diverted and disposed material types have calculated monthly weights following the provided guidance.
- The calculator will calculate the diversion rate using the following calculation.

Diversion = Material Weights (Reduce + Reuse + Compost + Recycle)

Total Generation = Material Weights (Landfill + WtE + Incineration + Diversion)

$$\text{DIVERSION RATE (\%)} = \left[\frac{\text{Diversion Generation}}{\text{Total Generation}}\right] \times 100$$

ADAPTATIONS

Events: The reporting period must be the length of the event, including setup and takedown.

Construction: The reporting period is the length of the construction project.

RESOURCES

Zero Waste Calculator

Performance and Impact | Prerequisite 2

PIp2 Evaluate Greenhouse Gas Emissions

Required

INTENT

To understand the greenhouse gas emissions impact of waste.

REQUIREMENTS

- Utilize the fields in the **Zero Waste Calculator** to determine the emissions impact of waste generated and diverted in metric tons of carbon dioxide equivalent for the 12-month reporting period.

SUBMITTAL DOCUMENTATION

- **Zero Waste Calculator** with completed fields for emissions calculations for the 12-month reporting period.
- Narrative describing any additional information or calculations used to support emissions calculations.

GUIDANCE

- Review the **Zero Waste Calculator** to ensure all diverted and disposed material types and weight data are captured. Follow the instructions to select the appropriate project location and material types to calculate the emissions.

ADAPTATIONS

Events: The reporting period must be the length of the event, including setup and takedown.

Construction: The reporting period is the length of the construction project.

RESOURCES

Zero Waste Calculator

Performance and Impact | Credit 1

PIc1 Excel in Zero Waste Diversion

1–5 Points

INTENT

To encourage exceptional diversion of waste material from landfill and incineration.

REQUIREMENTS

- Use the **Zero Waste Calculator** from **MAp1: Standardize Waste Tracking System** and review it to ensure all material types are captured.
- Using the calculator, identify the diversion rate for the 12-month reporting period and evaluate points based on the following table.

Diversion Percentage	Points
90.1%–92%	1
92.1%–94%	2
94.1%–96%	3
96.1%–98%	4
98.1%–100%	5

SUBMITTAL DOCUMENTATION

- **Zero Waste Calculator** per requirements in **MAp1: Standardize Waste Tracking System** with diversion rate calculated for the 12-month reporting period.

Performance and Impact | Credit 1

GUIDANCE

- Review data captured in the **Zero Waste Calculator** and ensure all diverted and disposed material types and data are entered, including reduction and reuse waste streams.
- The calculator will calculate the diversion rate using the following calculation.

Diversion = Material Weights (Reduce + Reuse + Compost + Recycle)

Total Generation = Material Weights (Landfill + WtE + Incineration + Diversion)

$$\text{DIVERSION RATE (\%)} = \left[\frac{\text{Diversion Generation}}{\text{Total Generation}}\right] \times 100$$

ADAPTATIONS

Events: The reporting period must be the length of the event, including setup and takedown.

Construction: The reporting period is the length of the construction project.

RELATED CREDITS & RESOURCES

MAp1: Standardize Waste Tracking System

Zero Waste Calculator

Performance and Impact | Credit 2

PIc2 Prioritize Preferred Diversion Strategies

1–5 Points

INTENT

To encourage diversion strategies that demonstrate the highest and best use of materials.

REQUIREMENTS

- Use the **Zero Waste Calculator** from **MAp1: Standardize Waste Tracking System** and review it to ensure all material types are captured.
- Using the calculator, identify the percentage of diversion from rethink, redesign, reduce, or reuse for the 12-month reporting period and achieve points based on the following table.

Percent Diversion from Rethink/Redesign/Reduce or Reuse	Points
10%	1
20%	2
30%	3
38%	4
45%+	5

SUBMITTAL DOCUMENTATION

- **Zero Waste Calculator** per requirements in **MAp1: Standardize Waste Tracking System** with the diversion rate and the reduction and reuse diversion calculated for the 12-month reporting period.

Performance and Impact | Credit 2

GUIDANCE

- Review data captured in the **Zero Waste Calculator** and ensure all diverted and disposed material types and data are entered, including reduction and reuse waste streams.
- The calculator will calculate the diversion rate using the following calculation.

Diversion = Material Weights (Reduce + Reuse + Compost + Recycle)

Total Generation = Material Weights (Landfill + WtE + Incineration + Diversion)

$$\text{DIVERSION RATE (\%)} = \left[\frac{\text{Diversion Generation}}{\text{Total Generation}}\right] \times 100$$

ADAPTATIONS

Events: The reporting period must be the length of the event, including setup and takedown.

Construction: The reporting period is the length of the construction project.

RELATED CREDITS & RESOURCES

MAp1: Standardize Waste Tracking System

Zero Waste Calculator

Zero Waste Hierarchy

Performance and Impact | Credit 3

PIc3 Evaluate Material Emissions

1–2 Points

INTENT

To understand the greenhouse gas emissions impact of inbound materials from the upstream supply chain.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 2 points.

Plan: Prepare to Calculate Material Emissions Impact — **1 Point**

- Compile a list of twenty (20) top ongoing consumable and durable product types purchased within the 12-month reporting period.
- Align each material with the appropriate spend-based category in the **Zero Waste Calculator** from **MAp1: Standardize Waste Tracking System**.

AND

Implement: Calculate Material Emissions — **1 Point**

- Collect the purchasing data for the reporting period (total cost spent) for the top twenty product types purchased within the 12-month reporting period.
- Calculate the annual emissions in metric tons of carbon dioxide equivalent (CO2e) for the top twenty product types following the instructions in the **Zero Waste Calculator** for the spend-based method.
  - » If the project has previously conducted Scope 3 calculations for Purchased Goods and Services within the last 24 months prior to the end of the reporting period, those calculations may be submitted. Calculations completed through methods other than spend-based comply.

SUBMITTAL DOCUMENTATION

Plan:

- Narrative describing why the top twenty product types were chosen and the impact on the project.
- List of top twenty product types and appropriate category in the **Zero Waste Calculator**.

Implement:

- **Zero Waste Calculator** with top materials and spend with calculated emissions for the 12-month reporting period OR previous Scope 3 calculations from the last 24 months prior to the end of the reporting period.
- Narrative describing methodology for Scope 3 calculations, data sources, and emission factor sources if different from the **Zero Waste Calculator**.

Performance and Impact | Credit 3

GUIDANCE

- The top twenty product types can be based on frequency of purchase, amount purchased, total spend, or other impact on the project.
- Review **Supplementary Guidance** for additional information on Scope 3 and material emissions.
- If the project has not previously calculated the Category 1 emissions, the **Zero Waste Calculator** provides data for calculating the emissions for the product types using the spend-based method.
- Follow the instructions in the **Zero Waste Calculator** to choose the appropriate category based on the purchases.

ADAPTATIONS

Events: The reporting period must be the length of the event, including setup and takedown.

Construction: The reporting period is the length of the construction project.

RELATED CREDITS & RESOURCES

SCp1: Develop a Purchasing Policy

MAp1: Standardize Waste Tracking System

Supplementary Guidance

Zero Waste Calculator

Performance and Impact | Credit 4

PIc4 Calculate Transport Emissions

1 Point

INTENT

To capture the transportation impacts of downstream waste management and reward steps taken to reduce transportation emissions.

REQUIREMENTS

Using the **Zero Waste Calculator**, calculate the emissions impact of waste transportation to the final destination using the distances to the outlets and transportation methods for the 12-month reporting period.

SUBMITTAL DOCUMENTATION

- Narrative describing transportation methods and outlet locations.
- Documentation supporting transportation methods and outlet locations (e.g., hauler reports/invoices, waste tickets, hauler communications, photographs).

GUIDANCE

- Work with personnel such as accounting, procurement, operations, office management, as well as waste vendors to determine the final destination of each waste stream.
- Confirm the transportation method used for each waste stream. Note that there may be more than one method for a waste stream.
- Using a mapping tool, estimate the total distance the waste travels from when it leaves the project boundary to when it reaches the final destination.
- Input this data into the **Zero Waste Calculator**, using the drop-down menu to select the transportation method. If multiple methods are used, enter the distance and method accordingly.
- The **Zero Waste Calculator** will calculate the emissions associated with waste transport by type.

ADAPTATIONS

Events: The reporting period must be the length of the event, including setup and takedown.

Construction: The reporting period is the length of the construction project.

Performance and Impact | Credit 4

RESOURCES

Zero Waste Calculator

Performance and Impact | Credit 5

PIc5 Determine Zero Waste Financial Impact

1–2 Points

INTENT

To quantify the financial impacts of implemented waste reduction and diversion strategies.

REQUIREMENTS

Pursue Option 1 and Option 2 for a maximum of 2 points.

Option 1: Calculation of Zero Waste Financial Impact — 1 Point

- Calculate the financial impact of waste within the project boundary, including the total cost of disposal and diversion and the cost of all materials wasted for the 12-month reporting period.
- For diversion initiatives implemented within the 12-month period, calculate the avoided cost of waste, including diversion fees and material purchases.
- Document any soft costs, such as rework, material handling, or janitorial services for the 12-month reporting period.
- If any implemented strategies were identified and quantified in **MAc4: Analyze and Execute Waste Audit Findings**, then savings may be used in this credit.

AND

Option 2: Zero Waste for Business Decisions — 1 Point

- Create a methodology to calculate the return on investment (ROI) or payback of zero waste and diversion initiatives.
- Document how the full financial impact and ROI of zero waste are used to inform business decisions.

SUBMITTAL DOCUMENTATION

Option 1:

- **Zero Waste Calculator** calculating the full cost of waste for the 12-month reporting period.
- Narrative describing any additional calculations or estimates required.
- Additional calculations, if required.

Option 2:

- Narrative describing the method of calculating ROI or payback and how this is used to inform business decisions.
- Example calculations.

Performance and Impact | Credit 5

GUIDANCE

Option 1:

- Use the **Zero Waste Calculator** to review all materials disposed of within the project boundary.
- Use this data and data captured in **MAc2: Implement Financial Data Tracking** to calculate the full cost of disposal or diversion for the 12-month period.
- Use the results of **MAp2: Conduct a Waste Audit** or **MAc3: Conduct a Comprehensive Zero Waste Audit** to estimate the amount of materials disposed annually by weight.
- Work with the procurement team and use the data collected during the **Zero Waste Audit** to calculate the estimated cost of materials disposed annually.
- Review with personnel to understand any soft costs such as time to rework, additional utility usage, material handling, or janitorial services.

Option 2:

- Work with internal personnel, including finance, to create a methodology that captures key financial information, including but not limited to the cost of waste disposal, cost of lost materials, soft costs of material handling, and project implementation costs. Use the data in Option 1 to determine the appropriate methodology for the project.
- Work with upper management to incorporate the ROI into business decisions, such as project implementation, capital planning, and goal setting.

ADAPTATIONS

Events: The reporting period must be the length of the event, including setup and takedown.

Construction: The reporting period is the length of the construction project.

RELATED CREDITS & RESOURCES

MAp2: Conduct a Waste Audit

MAc2: Implement Financial Data Tracking

MAc3: Conduct a Comprehensive Zero Waste Audit

Zero Waste Calculator

Performance and Impact | Credit 6

PIc6 Identify Zero Waste Community Impact

1 Point

INTENT

To identify the social impacts of implemented waste reduction and diversion strategies.

REQUIREMENTS

- Identify the community and societal benefits of zero waste and diversion initiatives.
- Document how these impacts of zero waste are used to inform business decisions.
- Include the impacts of zero waste for both internal and external perspectives.

SUBMITTAL DOCUMENTATION

- Narrative describing the method of identifying community and societal benefits, including how this is used to inform business decisions.
- Summary document of the impacts identified, including, but not limited to:
  - » Identified impact.
  - » Material type or waste stream.
  - » Waste management method.
  - » Group impacted (personnel, community, etc.).
  - » Resulting behavior or procedural change(s) based on identified impact(s).

Performance and Impact | Credit 6

GUIDANCE

- Conduct a review of the waste generation and handling processes at the project to understand potential social impacts. The review can include, but is not limited to:
  - » Materials purchased.
  - » Waste generated.
  - » Waste service providers and outlets, including transportation.
  - » Material handling procedures
- Consider how each aspect of materials and waste management at the site may impact the personnel, visitors, and surrounding community. Examples include, but are not limited to:
  - » Safety regarding material handling, such as hazardous waste.
  - » Ergonomic concerns regarding material or waste handling.
  - » Air emissions due to waste transport.
  - » Air emissions from landfills, incineration, or other facilities.
  - » Impact on communities near waste processing facilities, especially hazardous waste.
  - » Water pollution from waste processing facilities and landfills.
  - » Food being wasted instead of donated to a food pantry.
  - » Natural resources and impact of mining versus circular systems.
- Consider how the identified community impacts can influence zero waste initiatives and decisions. Examples include, but are not limited to:
  - » Review internal waste procedures to reduce hazards and ergonomic issues for personnel.
  - » Evaluate waste outlets by distance from local vulnerable and underrepresented communities.
  - » Determine ways to reduce food waste or increase donation to reduce food shortages.
  - » Implement a circular system to reduce natural resources or fossil fuels.

Performance and Impact | Credit 7

PIc7 Minimize Waste Generation

1–5 Points

INTENT

To encourage a reduction in total waste generated at the project in addition to waste diversion.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 5 points.

Plan: Develop Baseline

1 Point

- Collect a minimum of 12 months of waste data from a period prior to the certification year. Import the data into the calculator as a baseline.
  - » All waste data must be included (diverted and non-diverted).
- Determine the appropriate intensity metric based on the facility type. Metrics include, but are not limited to, production, revenue, square footage, labor-hours, or number of personnel.
- Collect data for the intensity metric for the baseline year and current year. Data must be annual at a minimum but is encouraged to be monthly.
- Calculate the waste intensity for the baseline year and the current year.

AND

Implement: Evaluate Waste Intensity Reduction

1–4 Points

- Show a reduction in waste intensity compared to the baseline year. Points are awarded according to the following table:

Reduction	Points
5%	1
10%	2
15%	3
20%	4

Performance and Impact | Credit 7

SUBMITTAL DOCUMENTATION

Plan:

- **Zero Waste Calculator** with at least 12 consecutive months of waste data for the baseline and, at a minimum, annual data for the intensity metric for the baseline and current year.
- The methodologies and calculations used to determine weight estimates, including volume-to-weight conversions, intermittent and non-standard waste, and reduction and reuse quantities.
- Documentation substantiating the amounts reported in the tracking system (e.g., hauler reports/invoices, tracking logs, photographs).

Implement:

- Calculation demonstrating intensity reduction from baseline to current.

GUIDANCE

- To establish the baseline, review the waste streams and materials captured for the current data year to determine what data needs to be captured for the baseline year. If the project is undergoing recertification, the previous certification data may be established as the baseline.
- Collect and input the baseline year data into the **Zero Waste Calculator**, ensuring that all units match the reporting period.
- For materials disposed of intermittently or when data is not provided monthly, follow the guidance in the **Supplementary Guidance** on how to estimate monthly data.
- Evaluate the appropriate intensity metric for the project. Examples include, but are not limited to:
  - » Office space: waste per area (e.g., tons of waste generated per square foot)
  - » Manufacturing: waste per unit production (e.g., tons of waste generated per unit produced)
  - » Manufacturing or warehouse: waste per labor-hour (e.g., tons of waste generated per hour worked)
  - » Event: waste per visitor or attendee (e.g., tons of waste per attendee)
- Follow the calculator guidance to input the metric for the reporting period and the baseline year into the **Zero Waste Calculator**.

ADAPTATIONS

Events: The baseline period can be a previous event, if recurring.

Construction: The baseline period can be a previous construction project.

Performance and Impact | Credit 7

RESOURCES

Supplementary Guidance

Zero Waste Calculator



Climate Pledge Arena | TRUE Platinum | Seattle, WA, U.S.

Project Priority

Project Priority

CATEGORY OVERVIEW

The Project Priority (PR) credit category provides flexibility for different project types and innovative strategies. It allows for credit achievement that is supportive of amplifying success, advancing social justice, and implementing restorative actions related to the circular economy.

The PR category includes a list of potential credits related to innovation, specific facility types, construction adaptations, and event adaptations. The category can also be used by projects to submit innovative strategies that are unique to the project and not covered elsewhere in the rating system. Project teams may earn up to fifteen (15) total points by pursuing credits from the list of available PR credits and/or by submitting innovative strategies.

The Project Priority Library can be found in the Project Priority Appendix.

Glossary

ANAEROBIC DIGESTION (AD) – A series of processes in which microorganisms break down biodegradable material in the absence of oxygen, used for industrial or domestic purposes to manage waste and/or to generate energy. Note: TRUE does not recognize anaerobic digestion used to generate energy as an acceptable means of diversion.

BASELINE – A basic standard or level; guideline or specific value or values that can serve as a comparison or control.

BASE YEAR – Year tracking began for diversion and/or financial data; year of first available diversion and/or financial data. This could, at a minimum, be the reporting year immediately preceding the most recent reporting year (calendar or otherwise).

CIRCULAR ECONOMY – "A system where materials are never wasted and where nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacturing, recycling, and composting. The circular economy addresses climate change and other global challenges, like biodiversity loss, waste, and pollution, by decoupling economic activity from the consumption of finite resources." (Ellen MacArthur Foundation)

COMPOSTING – The controlled aerobic decomposition of organic matter by microorganisms.

CONSUMABLES – Consumable product types include non-durable products that are purchased often (on an ongoing basis) and quickly used up and replaced, such as office supplies, beverage containers, janitorial products, and packaging.

CONTAMINATION – Materials or substances that are unintentionally mixed with recyclables or compostables that diminish or destroy the utility or value of the recyclables or compostables.

COST – The monetary value of resources used for an operation during a given period.

- **AVOIDED COST (COST AVOIDANCE)** – The reduction in costs of one activity made possible by the operation of a different activity. In solid waste management, avoided costs often mean savings realized in the cost of collecting, transferring, transporting, and disposing of garbage that is made possible by waste reduction, recycling, and composting.
- **NET COST** – Full cost of a solid waste management activity, minus its byproduct or value-added revenues.

DANGEROUS GOODS – See definition for Hazardous Materials.

DISPOSAL – The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater.

DOWNCYCLING – Recycling practice that involves breaking an item down into its component elements or materials. Once the constituent elements or materials are recovered, they are reused if possible but usually as a lower-value product.

Glossary

DOWNSTREAM – Related to materials and waste leaving the project boundary. Materials that leave the project boundary as waste, diversion, or through other processes and activities.

DURABLES – Durable product types include non-consumable products that are purchased infrequently because they are reused and not discarded after a single use. Examples include reusable beverage containers, reusable pallets, or washable cloth towels instead of paper towels.

END MARKET – Any person or place receiving processed or unprocessed source-separated recyclable material and utilizing the material as a finished product or as feedstock material for a manufacturing process. Also referred to as an outlet.

HAULER – A waste collection company that provides refuse and other material removal services. Includes both private and public entities. Synonymous with service provider, collector, and vendor.

HAZARDOUS MATERIAL – Any material, especially ignitable, corrosive, reactive, toxic, radioactive, compressed gases, or other hazardous materials, that may pose a danger to public health or the environment. Also referred to as Dangerous Goods.

HAZARDOUS WASTE – Waste that poses substantial or potential threats to public health or the environment. See Hazardous Material.

HIGHEST AND BEST USE – Creating and keeping materials and products for a use as high on the hierarchy as possible and in the useful loop as long as possible. Keeping materials from being downcycled where the number of future uses or options is limited. Source separate items and materials to the extent necessary to ensure clean and marketable products and materials for reuse, recycling, and composting streams.

INCINERATION – Reducing the volume of solid waste by use of an enclosed device and controlled flame combustion.

LANDFILL – A pollution control facility for safe/sanitary final disposal of solid waste on land. The refuse is spread and compacted and a cover of soil is applied in order to minimize environmental impacts (including public health and safety). Under current regulations, landfills are required to have liners and leachate treatment systems to prevent contamination of groundwater and surface waters.

LOCAL – Any source within 100 miles (161 kilometers) of the project (as measured by travel distance on a map).

MATERIAL RECOVERY FACILITY (MRF) – An intermediate processing facility designed to remove recyclables and other valuable materials from the waste stream utilizing manual or mechanical methods.

MATERIAL TYPE – A classification that groups materials with similar properties for purposes of managing them in a system (e.g., metal, plastic, and glass).

OPPORTUNITY – A strategy identified for purposes of enacting change and/or improvement.

PAPER PRODUCTS – A product type made with paper, paperboard, or fibrous materials such as corrugated boxes, printing paper, and toilet paper.

Glossary

PERSONNEL – The employees or staff that work for a project location that is seeking TRUE certification. Personnel include all levels and types of staff (e.g., upper management, procurement, fabricators, custodial, and human resources). Personnel can also include contractors, service providers, visitors, customers, or others that come into the project boundary.

POINTS OF GENERATION – The Points of Generation are areas within a project that are sources of diverted and disposed materials. The areas can be unique to each project, but they help categorize strategies, procedures, and zero waste efforts. The Points of Generation can include, but are not limited to warehousing and distribution, offices, food services, grounds, construction, manufacturing, retail, and housing and hospitality.

POST-CONSUMER MATERIALS – Recovered materials that have been used as a consumer item and are diverted from municipal solid waste for the purpose of collection, recycling, and disposition. Excludes materials from industrial processes that have not reached the consumer, such as glass broken during the manufacturing process or over-issues of newspapers and magazines.

PRODUCT TYPE – A category of purchased goods with similar composition and characteristics that can be either consumable (e.g., single-use service ware, food, and paper products) or durable (e.g., computers, equipment, and furniture).

PROJECT – The facility (or group of facilities on one property) applying for certification is considered a "project." For additional guidance on what defines a "project," refer to the Scope section.

PROJECT BOUNDARY – A project is defined by the legal property boundary, which may or may not include multiple buildings. For projects located on publicly owned land, within a greater facility not seeking certification, or campuses that do not have internal property lines, the project boundary may use the legal limits of the campus or define an alternative boundary that is wholly contained within the legally owned site. For additional guidance on project boundary, refer to the Scope section.

PROJECT TEAM – A group of project personnel that may include employees and/or contractors who are responsible for zero waste planning, implementation, and TRUE certification submittals.

RECYCLING – The series of activities by which discarded materials are collected, sorted, processed, converted into manufacturing feedstock material, and used in the creation of new products. Excludes use of these materials as a fuel substitute or for energy production.

REPAIR (A.K.A. REFURBISHING, REMANUFACTURING) – When an item is reconditioned and used for the same function.

REUSABLE – When an item is manufactured to be used over and over again and to replace disposable (single-use) items.

RESIDUES – Materials remaining after processing, incineration (WTE), composting, or recycling have been completed; usually disposed of in landfills.

REUSE – Use of a product or item in its original form more than one time.

Glossary

SERVICE PROVIDER – A vendor that provides management and/or collection services for refuse and/or reusable/recyclable materials. Service providers include both private and public entities. Examples include waste haulers, janitorial services, and recovery/recycling facilities.

SINGLE STREAM – Method of collecting all recyclable materials in one "stream" in a non-compartmentalized vehicle to be separated at a facility later. A single-stream program integrates the separation and collection components of recycling. Also referred to as Commingled or Mixed recycling.

SOURCE REDUCTION – Any action which causes a net reduction in the generation of solid waste. Source reduction includes, but is not limited to: reducing the use of non-recyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, reducing the amount of yard waste generated, establishing garbage rate structures with incentives to reduce waste tonnage generated, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic, and other materials. Synonymous with waste prevention.

SOURCE SEPARATION – The act of separating recyclable or reusable materials based on material type or product types from other materials intended for disposal. Also referred to as source segregation.

UNIVERSAL WASTE – A category of waste materials not designated as "hazardous waste," but containing materials that need to be prevented from free release into the environment. Examples include but are not limited to batteries, fluorescent lamps, electronics, aerosol cans, pesticides, and mercury-containing equipment. Also referred to as Common Hazardous Waste or Commonly Generated Hazardous Waste.

UPCYCLING – Recycling of materials that retains the majority of the materials' integrity and energy value, while creating a new item or material that will be employed in a long, useful life or purpose.

UPPER MANAGEMENT – Senior leadership within an organization that has oversight and decision-making authority. Can be an individual or team. Also referred to as Leadership, Leadership Team, Executive Leadership, and Senior Management.

UPSTREAM – Related to materials entering the project boundary.

VENDOR – Third-party organizations that supply goods, services, or materials.

WASTE AUDIT – Physical analysis of waste, including separation by material and disposal type to better understand waste at the project and identify opportunities for waste diversion and contamination reduction.

WASTE GENERATION – The amount (weight or volume) of materials and products that enter the waste stream before recycling, composting, landfilling, or combustion takes place

WASTE REDUCTION – The combined efforts of waste prevention, reuse, composting, and recycling practices.

WASTE STREAM – A group of material types that are disposed or diverted through the same method. Examples of different waste streams include organic waste, recycling, and hazardous waste.

WASTE-TO-ENERGY (WtE) – The conversion of recovered solid waste into a usable form of energy, usually through combustion at extremely high temperatures.

Glossary

ZERO WASTE – The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.[3]

ZERO WASTE AUDIT – A **Zero Waste Audit** builds on a **Waste Audit** to focus on preventing waste by evaluating waste at each **Point of Generation** and identifying upstream opportunities for reduction and diversion

ZERO WASTE HIERARCHY – The Zero Waste Hierarchy provides a structured framework for waste prevention, material recovery, and sustainable resource management. It is designed to guide policymakers, businesses, and individuals and expands on the widely recognized 3Rs (Reduce, Reuse, Recycle) to prioritize actions that drive systemic change toward a circular economy. The Hierarchy serves as a key policy tool for developing zero waste strategies and fostering a more sustainable future.[10]

ZERO WASTE INTERNATIONAL ALLIANCE (ZWIA) – ZWIA was formed in 2003 to promote positive alternatives to landfill and incineration and to raise community awareness of the social and economic benefits to be gained when wasted materials are regarded as resources that can create both employment and business opportunities.[11]

Resource Web Pages

The following are the full web page addresses (i.e., URLs) used throughout the TRUE Rating System.

Resource Name	Web Page Address
Zero Waste International Alliance	zwia.org/zwh/
TRUE Advisor Certification	true.gbci.org/true-advisor
Recycle Across America	recycleacrossamerica.org/
Responsible Purchasing Network	responsiblepurchasing.org/
Introduction to Ecolabels and Standards for Greener Products – U.S. EPA	epa.gov/greenerproducts/introduction-ecolabels-and-standards-greener-products
Biodegradable Products Institute (BPI)	bpiworld.org/bpi
Center for Zero Waste Design	centerforzerowastedesign.org/

COPYRIGHT

Copyright © 2026 by the U.S. Green Building Council. All rights reserved.

DISCLAIMER

None of the parties involved in the funding or creation of this document, including the USGBC, its members, its contractors, or the United States government, assume any liability or responsibility to the user or any third parties for the accuracy, completeness, or use of or reliance on any information contained in this document, or for any injuries, losses, or damages (including, without limitation, equitable relief) arising from such use or reliance. Although the information contained in this document is believed to be reliable and accurate, all materials set forth within are provided without warranties of any kind, either express or implied, including but not limited to warranties of the accuracy or completeness of the information contained in the training or the suitability of the information for any particular purpose. As a condition of use, the user covenants not to sue and agrees to waive and release the U.S. Green Building Council, its members, its contractors, and the United States government from any and all claims, demands, and causes of action for any injuries, losses, or damages (including, without limitation, equitable relief) that the user may now or hereafter have a right to assert against such parties as a result of the use of, or reliance on, this document. U.S. Green Building Council 2101 L Street, NW Suite 600 Washington, DC 20036



Climate Pledge Arena | TRUE Platinum | Seattle, WA, U.S.

Appendix 1: Project Priority Library

Project Priority

CATEGORY OVERVIEW

The Project Priority category provides flexibility for different project types and innovative strategies. It allows for credit achievement that is supportive of amplifying success, advancing social justice, and implementing restorative actions related to the circular economy.

The Project Priority category includes a list of potential credits related to innovation, specific facility types, construction adaptations, and event adaptations. The category can also be used by projects to submit innovative strategies that are unique to the project. Projects may submit measures and strategies not covered by the rating system.

Project teams may select from the list of available credits or submit innovative strategies for up to fifteen (15) total points.

Project Priority

Number	Credit	Points
PRc1	Publish Case Study on TRUE's Website	2
PRc2	Off-site Reuse to Charitable Organization	2
PRc3	Demonstrate Regenerative Nature of Circular Economy: Renewable Feedstocks	2
PRc4	Utilize Technology for Advanced Waste Data and Tracking	2
PRc5	Develop Material Process Flow	1
PRc6	Community Engagement: TRUE Certified Event	2
PRc7	C&D Waste Management for Renovations	1
PRc8	Material and Waste Carbon Projection	1
PRc9	Manufacturers: Establish Takeback Program	2
PRc10	Conduct Long-Term Zero Waste Planning	2
PRc11	Include a TRUE Advisor in Waste Audit	1

Project Priority | Credit 1

PRc1 Publish Case Study on TRUE's Website

2 Points

INTENT

To demonstrate zero waste leadership and communicate best practices to other projects.

REQUIREMENTS

- Develop a public-facing case study of zero waste initiatives for the project. Include key impact metrics, best practices, lessons learned, and other information relevant to the zero waste program's success.
- Submit to GBCI for publication on TRUE's website.

SUBMITTAL DOCUMENTATION

- Zero waste case study.
- Written permission for the case study to be published on TRUE's website and made visible to the public.

GUIDANCE

- Within the case study, include:
  - » Project information, such as the name of the project/building, location, project type, and size.
  - » Project-specific diversion initiatives and strategies.
  - » Key impact metrics from the **Zero Waste Calculator** and the Performance and Impact category, such as **PIp1: Meet 90% Diversion Performance** and **PIp2: Evaluate Greenhouse Gas Emissions**.
  - » Consider including additional information that demonstrates novel strategies, best practices, or challenges overcome by the project that may be useful to other projects with waste reduction goals.

RELATED CREDITS & RESOURCES

PIp1: Meet 90% Diversion Performance

PIp2: Evaluate Greenhouse Gas Emissions

Zero Waste Calculator

Project Priority | Credit 2

PRc2 Off-site Reuse to Charitable Organization

2 Points

INTENT

To support community-focused organizations that contribute to the **local** circular economy.

REQUIREMENTS

- Demonstrate that 25% or more (by weight or volume) of at least one (1) material type generated at the project's site is collected through source separation and directed to at least one (1) **local** charitable reuse organization for a minimum of three (3) months during the reporting period.

SUBMITTAL DOCUMENTATION

- Narrative describing the local reuse outlet, what material type(s) were donated, and how the outlet keeps the material(s) in circularity.
- Data specifying the type and amount (weight or volume) of material directed to local reuse.
- Documentation verifying the donation, such as contracts, official agreements, receipts, or invoices.

GUIDANCE

- Local is defined as 100 miles (160 km).
- Assess opportunities to direct durable goods or materials generated within the project boundary to local charitable reuse organizations.
- As a best practice, select a receiving outlet that is a registered 501(c)(3) non-profit organization or equivalent charitable organization.

RELATED CREDITS & RESOURCES

SCc6: Advance Local Circularity

IRS Tax Exempt Organization Search Tool

Project Priority | Credit 3

PRc3 Demonstrate Regenerative Nature of Circular Economy: Renewable Feedstocks

1–2 Points

(for manufacturing facilities only)

INTENT

To incorporate circular economy principles into the project beyond waste.

REQUIREMENTS

- Demonstrate that the required threshold amount of one (1) feedstock type (by weight, volume, or cost) used in the manufacturing of a product within the project is from rapidly renewable sources.
- The threshold value must be met each month for a minimum of three (3) consecutive months of the 12-month reporting period.
- Rapidly renewable means the feedstocks are made from agricultural products that are harvested within a 10-year or shorter harvest cycle.

Points are awarded according to the following table.

Threshold Amount (% by Weight, Volume, or Cost)	Points
10%–19.9%	1
≥20%	2

SUBMITTAL DOCUMENTATION

- Narrative describing the rapidly renewable feedstock(s) used and the typical harvest cycle.
- Purchasing data for all feedstocks and rapidly renewable feedstocks for the 3-month period.
- Documentation verifying that the feedstocks are renewable, such as certifications, contract language, or specifications.

GUIDANCE

- Evaluate materials used in the manufacturing process that currently use rapidly renewable feedstock or could be substituted with rapidly renewable feedstocks.
- Work with personnel, including those in operations, product management, engineering, procurement, or similar groups, to evaluate the potential advantages and challenges of using a rapidly renewable feedstock.
- Consider impacts to the project such as costs, availability, transportation, emissions, or other impacts to evaluate the feasibility of converting to rapidly renewable feedstocks.

Project Priority | Credit 4

PRc4 Utilize Technology for Advanced Waste Data and Tracking

2 Points

INTENT

To leverage emerging technology to effectively facilitate and support progress toward zero waste.

REQUIREMENTS

- Develop a new technology or digital platform, or use an existing one, that assists in and improves waste data collection, analysis, and/or ongoing waste tracking.
- Technology must achieve one of the following as compared to business as usual:
  - » Reduce costs without reducing accuracy.
  - » Improve efficiency without reducing accuracy.
  - » Improve accuracy.

SUBMITTAL DOCUMENTATION

- Narrative describing the technology used, including the following at a minimum:
  - » How the technology was used to assist with waste data collection and analysis.
  - » What tasks the technology assisted with or replaced.
  - » Metrics demonstrating how technology improved outcomes compared to business as usual.
- Name of the company that developed the technology (if not custom-made internally).
- Visual examples of the technology (such as screenshots) and photographs of the technology in use on the project.

GUIDANCE

- Identify waste-related opportunities that could benefit from advanced use of technology.
- Work with a vendor of an existing technology or with project personnel to develop custom applications specific to the project's unique needs.
- Examples may include, but are not limited to:
  - » Using artificial intelligence (AI) to scan, identify, and assign weights to materials during a **Waste Audit**
  - » Using devices to monitor bin and container levels or contamination
  - » Using a platform to compile and analyze waste data
- Track progress and compare outcomes to business-as-usual practices. Note: Any cost reduction data can be represented as a percent reduction.

Project Priority | Credit 4

RELATED CREDITS

MAp1: Standardize Waste Tracking System

MAp2: Conduct a Waste Audit

MAc3: Conduct a Comprehensive Zero Waste Audit

MAc4: Analyze and Execute Waste Audit Findings

Project Priority | Credit 5

PRc5 Develop Material Process Flow

1 Point

INTENT

To capture and understand the movement of all material types within the project's various waste streams to improve outcomes.

REQUIREMENTS

- Develop a process flow diagram or narrative that documents the movement of the top three (3) material types from each end-of-life method identified in **MAp2: Conduct a Waste Audit**, from where it enters to where it exits (disposal or diversion).
  - » Include any steps between material entrance and material exit, such as handoffs where responsibility changes.
  - » Include any reuse or recycling that occurs within the project boundary.
- Document the responsible parties (including personnel and service providers) for each step of the process flow.
- Identify any gaps, challenges, and opportunities to reduce waste or increase diversion. Develop a preliminary plan to improve the process flow and address identified issues.

SUBMITTAL DOCUMENTATION

- Copy of the process flow document with responsible parties.
- Narrative describing the development of the process flow.
- Narrative identifying the challenges and a preliminary plan to address each challenge.

GUIDANCE

- Review materials coming into the project boundary. Identify **Points of Generation** (office, warehouse, etc.) and the party responsible for each.
- Coordinate with personnel and service providers to evaluate how the materials are used until disposal or diversion.
- Consider how the materials move through the facility, including personnel who interact with the material, applicable bins and containers, and final collection for diversion and disposal.
- Evaluate where ongoing issues are occurring, including, but not limited to, contamination, materials going to incorrect outlets, or unclear responsibilities.

Project Priority | Credit 5

RELATED CREDITS

MAp2: Conduct a Waste Audit

MAc3: Conduct a Comprehensive Zero Waste Audit

RDc2: Divert Across the Points of Generation

Project Priority | Credit 6

PRc6 Community Engagement: TRUE Certified Event

1–2 Points

INTENT

To showcase and encourage zero waste practices in the community.

REQUIREMENTS

Pursue Plan and Implement for a maximum of 2 points.

If **TEc5: Engage the Community** is attempted, pursue TRUE certification for the community event using the TRUE v2 Events Adaptation.

Plan: Prepare for Zero Waste Event — **1 Point**

- Plan for the community event in **TEc5: Engage the Community** to be a zero waste event in accordance with the TRUE v2 Events Adaptation.
- At a minimum, plan to achieve all prerequisites and at least 40 points to achieve the "Certified" level.

AND

Implement: Achieve TRUE for Events Certification — **1 Point**

- Implement the strategies in the zero waste plan in the community event.
- Achieve TRUE v2 certification for the community event in **TEc5: Engage the Community**.

SUBMITTAL DOCUMENTATION

Plan:

- Narrative describing the process of developing the zero waste plan and how it aligns with TRUE v2 certification.
- Copy of the zero waste event plan.

Implement:

- Copy of the TRUE v2 for Events certification.
- Documentation demonstrating implementation of the zero waste plan at the community event, such as photographs, procedures, data, or other evidence.

Project Priority | Credit 6

GUIDANCE

- As a best practice, develop the zero waste event plan early in the planning process.
- Work with the event planners to evaluate zero waste opportunities for the event. Areas to consider can include, but are not limited to:
  - » Material types present at the event:
    - Durable items
    - Decor
    - Signage
    - Dishware and beverage containers
    - Food and beverages
    - Giveaways, prizes, or items available to purchase
    - Packaging for incoming materials
  - » Bins and containers:
    - Size and type
    - Number of bins and locations
    - Signage
    - Collection procedures
  - » Service providers:
    - Coordination
    - Pickup schedule
- Develop strategies for zero waste in alignment with the Zero Waste Hierarchy. Strategies can include, but are not limited to:
  - » Reduce or remove the use of printed flyers, programs, and brochures by creating a digital option.
  - » Design signs and other promotional items so that they can be used at future events or in future years, such as by not including the date.
  - » Implement water refill stations or provide an incentive for reusable cups.
  - » Evaluate whether durable items can be reused or can be donated for reuse.
  - » Provide education to personnel, service providers, and attendees on the importance of zero waste.

RELATED CREDITS

TEc5: Engage the Community

Project Priority | Credit 7

PRc7 C&D Waste Management for Renovations

1 Point

INTENT

To reduce construction and demolition (C&D) waste disposed of in landfills and incineration facilities by developing a replicable plan for managing C&D waste associated with renovations.

REQUIREMENTS

Develop a C&D Materials Management Plan that serves as a template for upcoming and/or future renovations in the project boundary. The plan must include the following at a minimum:

- A list of common materials used or generated during renovations and available strategies for diversion.
- Prioritization of strategies higher on the Zero Waste Hierarchy, including reduction strategies.
- Identification of preferred deconstructionists, reuse outlets, recycling haulers, single-material recycling facilities, and commingled (mixed) C&D processing facilities.
- A salvage assessment template that can be used to identify materials that can be salvaged and reused within the project boundary or off-site (sold or donated to a reuse outlet).
- Data collection, tracking, and reporting procedures.

SUBMITTAL DOCUMENTATION

- A narrative describing the process and stakeholders involved in developing the C&D Materials Management Plan.
- A copy of the C&D Materials Management Plan.

Project Priority | Credit 7

GUIDANCE

- Consider developing a planning and reporting template as part of the C&D Materials Management Plan that supports the planning and execution of an identified renovation project.
- Evaluate areas where the plan can minimize costs and maximize returns by lowering disposal costs, recovering value from scrap materials, and identifying materials for reuse.
- As a best practice, identify a recovery facility with third-party-verified recycling rates for commingled (mixed) C&D recycling. Third-party verification of recycling rates provides assurance that diversion rates are accurate and that materials are being diverted from landfill or incineration.
- Once a renovation project is identified, use the C&D Materials Management Plan early in the project design phase prior to construction. This allows sufficient time for planning and coordination, identification of effective strategies, and establishment of contractual agreements to maximize waste prevention and diversion.
- Use the plan for educating project teams, construction site workers, and waste haulers on the importance of following the plan for successful diversion.

RESOURCES

Recycling Certification Institute (RCI)

Project Priority | Credit 8

PRc8 Material and Waste Carbon Projection

1 Point

INTENT

To provide an understanding of current and future material use and carbon emissions.

REQUIREMENTS

- Using the data in **MAp1: Standardize Waste Tracking System** and **PIp2: Evaluate Greenhouse Gas Emissions**, estimate a carbon projection for the next 10 years for waste-related emissions.
- The projection must account for anticipated business growth or changes.
- Based on implemented strategies or identified future opportunities, develop a decarbonization plan that demonstrates an absolute emissions reduction of at least 25% compared to the 12-month reporting period.

SUBMITTAL DOCUMENTATION

- Narrative describing the process of developing the carbon projection, including key strategies impacting emissions and any impact resulting from business growth/changes.
- Copy of the carbon projection, including calculations and assumptions.

GUIDANCE

- Work with upper management to determine any anticipated business changes over the next 10 years. Changes could include, but are not limited to:
  - » Business growth.
  - » Facility changes, including upgrades, renovations, or expansions.
  - » Remote work policies.
  - » Investments in operational and material efficiencies.
  - » Takeback programs or similar strategies.
- Use the strategies identified during the TRUE certification process to estimate potential waste impacts, such as reduction, material changes, or end-of-life management changes.
- Estimate the potential year each of the changes may be implemented and incorporate them into the projection.
- Identify gaps or additional opportunities to reduce emissions.

Project Priority | Credit 8

RELATED CREDITS & RESOURCES

MAp1: Standardize Waste Tracking System

PIp2: Evaluate Greenhouse Gas Emissions

Zero Waste Calculator

Project Priority | Credit 9

PRc9 Manufacturers: Establish Takeback Program

1–2 Points

(for manufacturing facilities only)

INTENT

To demonstrate leadership by taking responsibility for end-of-life management for manufactured products.

REQUIREMENTS

Implement a system for customers to return products at end of life for recycling, refurbishment, or proper disposal.

Plan: Develop Takeback Program — **1 Point**

- Develop a plan for establishing a takeback program for at least one (1) product manufactured within the project boundary.
- At a minimum, the plan must include:
  - » Reason(s) for selecting the particular product(s).
  - » The process for takeback, including collection and shipping details, if applicable.
  - » Material processing steps once returned, such as reuse, refurbishment, recycling, or other diversion methods.
  - » Tracking procedure.
  - » Associated cost impact for the project and the customer and how the program is funded.
  - » Estimated impact for materials, waste, and cost.

AND

Implement: Establish Takeback Program — **1 Point**

- Establish the takeback program for at least one (1) product, either as a pilot or large-scale effort.
- Track the materials, waste, and cost impact for at least three (3) months of the 12-month reporting period.

Project Priority | Credit 9

SUBMITTAL DOCUMENTATION

Plan:

- Narrative describing the development of the takeback program.
- Takeback program plan, including the product(s) covered; the logistics associated with customer return of the product; how the program is funded and by whom; associated cost burden (if any) to the customer; and how the product will be recycled, refurbished, or properly disposed after being returned.

Implement:

- Narrative describing the implementation of the takeback program, including customer involvement, key personnel, and lessons learned.
- Documentation of any agreements or contracts to support the takeback program.
- Data specifying the impact on materials, waste, and cost for at least three (3) months of the 12-month reporting period.

GUIDANCE

- Manufacturer takeback programs are considered a form of extended producer responsibility. Establish a takeback program to show responsibility for end of life.
- To identify a product for the takeback program, consider the impact of the project's products, such as the impact on the customer, the likelihood of a customer successfully diverting the material, opportunities for reuse or refurbishment, or other criteria.
- Work with internal and external stakeholders such as operations, procurement, customer service, distributors, and customer representatives to determine streamlined logistics for a successful takeback program.
- Communicate the program to key stakeholders, including internal parties and customers.
- Consider working with similar industries or companies to coordinate and expand takeback programs.
- Consider how the takeback program may impact product design, such as durability, repairability, replacements, or material types (e.g., as feedstock for new products).

RESOURCES

Product Stewardship Institute

Project Priority | Credit 10

PRc10 Conduct Long-Term Zero Waste Planning

2 Points

INTENT

To identify strategies and initiatives that will position and guide the project toward long-term circularity success.

REQUIREMENTS

- Develop a set of long-term goals for reductions in material usage and waste generation over a minimum 10-year horizon.
- Develop a comprehensive plan to reach the long-term goals including the following at a minimum:
  - » Strategies that will be used to achieve reductions.
  - » Milestones, benchmarks, and key metrics to measure progress toward established goals.
  - » A process for training new and existing personnel on waste reduction initiatives.
  - » Estimated cost impact of the reductions and required investments.
  - » Team or individual responsible for continued tracking, education, and implementation.

SUBMITTAL DOCUMENTATION

- Narrative explaining the development of the plan.
- A copy of the long-term plan.

GUIDANCE

- While the goals and plan should focus on reductions within the project boundary, reduction of downstream impacts can also be considered.
- When developing strategies and metrics, consider setting targets for reduction, reuse, recycling, and organics management, and consider how performance can be measured over time.
- Establish a cadence for reporting ongoing progress toward meeting the goals (e.g., annually) and any periodic updates (e.g., every 5 years).
- As a best practice, include internal processes and timelines for incorporating continued evaluation, feedback, and improvement of strategies to meet the long-term goals.
- Identify a process to amend the plan to address any changes such as reduction goals, suppliers, vendors, processes, or technology.

Project Priority | Credit 10

RELATED CREDITS & RESOURCES

FPp1: Establish Zero Waste Goal and Policy

FPc1: Engage Upper Management in Zero Waste Activities

Zero Waste International Alliance

Project Priority | Credit 11

PRc11 Include a TRUE Advisor in Waste Audit

1 Point

INTENT

To ensure an effective **Waste Audit** aligned with TRUE principles.

REQUIREMENTS

- Include a TRUE Advisor during the **Waste Audit(s)** for **MAp2: Conduct a Waste Audit** and/or **MAc3: Conduct a Comprehensive Zero Waste Audit**.

SUBMITTAL DOCUMENTATION

- Narrative identifying the TRUE Advisor and describing their role in the waste audit(s).
- Copy of the active TRUE Advisor certificate for the participant.

GUIDANCE

- As a best practice, include the TRUE Advisor early in the planning process for the **Waste Audit(s)**, as well as during the opportunity identification and analysis process after the audit(s).
- The TRUE Advisor can be internal or an external consultant.

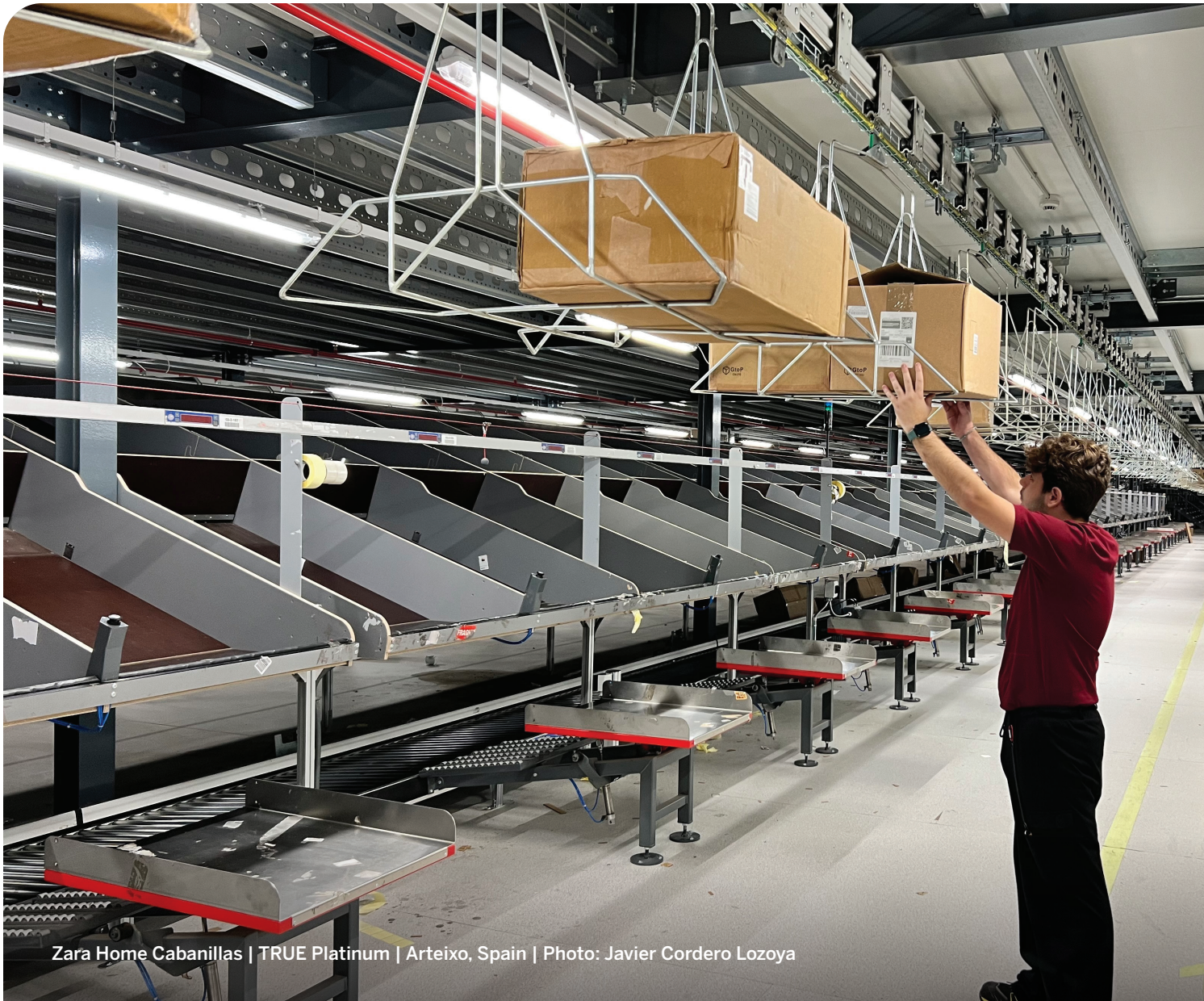
RELATED CREDITS

FPc3: Include a TRUE Advisor for Project

MAp2: Conduct a Waste Audit

MAc3: Conduct a Comprehensive Zero Waste Audit

Appendix 2: TRUE v2 Supplementary Guidance



Zara Home Cabanillas | TRUE Platinum | Arteixo, Spain | Photo: Javier Cordero Lozoya

TABLE OF CONTENTS

Overview 3

TRUE Material Scope 3

Allowable Diversion Methods 4

Measurement and Calculations 6

- Material Weights 6
- Calculating Reduction and Reuse 10
- Intermittent Diverted and Disposed Materials 11

Waste Audits 12

- Key Differences Between a Waste Audit and a Zero Waste Audit 12
- Procedure for a Waste Audit 14
- Procedure for a Zero Waste Audit 15

Points of Generation 16

Scope 3 Emissions 18

Overview

The **Supplementary Guidance** supports project teams through TRUE v2 by providing additional guidance, strategies, and best practices for key concepts and credits.

TRUE Material Scope

Projects may generate a wide variety of materials that can be difficult to categorize, and it may be unclear whether to track their weights for TRUE certification. This section defines material types and gives guidance on whether they should be included or excluded in the diversion data sets submitted to Green Business Certification Inc. (GBCI) for certification:

Materials are defined as solid, non-hazardous discards that are generated within the project boundaries. This includes materials generated during regular operations as well as those generated during episodic activities (construction and demolition, special events, etc.). Any materials the project takes ownership of and needs to dispose of or divert, regardless of whether they were originally generated on-site or off-site, must be included in the diversion data set.

Products are defined as tangible substances or goods that are refined, stored, or distributed for sale within the project boundaries. This refers to all items processed or held within the project boundaries for sale or commercial distribution. Per the definition of "Materials" above, "Products" do not include articles that are discarded due to low quality, production errors, or material received from upstream suppliers.

Hazardous materials are defined by the project's local jurisdiction, state, or country. If a material is considered hazardous by the local jurisdiction, state, or country, then it should be excluded from the material scope; but if the material is not considered hazardous, then it should be included in the material scope. For example, batteries are considered hazardous by some jurisdictions and non-hazardous by others. If they are considered hazardous, then the weight of the batteries should be excluded completely from the calculations. If they are not considered hazardous and are recyclable, then their weight should be included in the diversion calculations under the recycling category. If they are not considered hazardous and are not recyclable, then their weight should be included in the non-diversion numbers.

Liquids are included in the scope of materials if they are accepted in the landfill or by incineration/waste-to-energy (WtE) facilities by the local jurisdiction, state, or country. If they are accepted in the landfill or incineration/WtE facilities by the local jurisdiction, then they should be considered part of the project material scope and included in the diversion or non-diversion numbers depending on whether they were diverted or not.

Sludge is not typically considered part of the material scope; however, it may be included if the following conditions are met:

- The material would be allowed in the jurisdiction's landfill or incineration/WtE facilities.
- It does not include human waste/biosolids.
- It is not going to a wastewater treatment plant.

Wastewater of any kind should not be included in the TRUE materials scope. This is regardless of whether it is recycled or not diverted.

Allowable Diversion Methods

The guiding principles to consider when determining if a material can/should be counted in the diversion numbers are:

- Each end product must have a productive use in nature or the economy, other than as a fuel.
- The material must not be burned in the process of creating that new end product.
- The diversion method has little to no harmful effects on people, the environment, and the economy.
- The diversion method does not support energy or destructive disposal systems that are dependent upon the product to be continually discarded.
- The diversion method upholds the integrity and credibility of zero waste to support a circular economy.

Table 1 provides a list of common technologies and processes and identifies whether they are acceptable as diversion methods in TRUE v2 based on these principles:

Table 1: Allowable Diversion Technologies or Methods in TRUE v2

Technology/Diversion Method	Allowed as Diversion in TRUE?
Anaerobic digestion	✓
Animal feed Note: Feeding wild animals is allowed as diversion if scientific evidence (case studies, research, published works, etc.) is provided showing that it does not negatively impact the animals or the ecosystem.	✓
Alternative daily cover (ADC) at landfills	✗
Biodigesters—end product recovered for productive use	✓
Biodigesters—end product to wastewater treatment	✗
Chemical recycling—solid material end product recovered for productive use	✓
Chemical recycling—liquid end product used as fuel	✗
Cement kiln or other types of kilns	✗
Composting	✓
Dirty material recovery facilities (MRFs)—recyclable materials are combined with solid waste and separated at the MRF Note: Dirty MRFs may be included only if the project is located in a city with a franchise that requires the use of a Dirty MRF; there are no other options to divert material (selling commodities, trading privately, etc.); and documentation can be provided confirming this is the case.	✗

Allowable Diversion Methods

Technology/Diversion Method	Allowed as Diversion in TRUE?
Incineration	✕
In-sink disposal to wastewater	✕
Pyrolysis—end product (biochar) recovered for productive use in agriculture, filtration applications, and/or carbon sequestration in products (e.g., additive to concrete mix)	✓
Pyrolysis—end product used as fuel	✕
Recycling	✓
Reduction	✓
Reuse	✓
Upcycling	✓
Waste to fuel (liquid fuel, oil, and pellets) Examples: Pyrolysis for fuel, Solid Recoverable Fuel (SRF)	✕
Waste-to-energy	✕
Wastewater treatment	✕

Measurement and Calculations

MATERIAL WEIGHTS

For all materials in the project scope, the project team should collect weights using one of the following options to measure current diversion performance for the 12-month reporting period.

- Actual Weight Method
- Estimated Weight Method

Note that the monthly weights by material must be included in the **Zero Waste Calculator**.

ACTUAL WEIGHT METHOD

Using actual weights of the materials is the preferred and most accurate method. The project team can obtain these weights in several ways.

Service Provider

Documents from service providers, such as, but not limited to:

- Waste tickets
- Reports
- Invoices

Note: Typically, vendors will provide weights for materials collected in compactors and open-top containers but not in toters or front-load dumpsters.

In-House Scale

If documentation from a service provider is not available, direct weights can be obtained using an in-house scale.

- To calculate weights using in-house weighing, weigh the relevant materials at regular intervals to calculate monthly weights.
  - » Consider the frequency of generation to determine the appropriate cadence for recording weights and ensure an appropriate sample.
  - » Document all recorded weights.
- When submitting data, provide all recorded weights and explain how they were used to calculate monthly weights for the **Zero Waste Calculator**.
  - » The weights must be provided in a tabulated format.
  - » Provide supporting documentation representing at least one month of representative weights, such as photographs of the scale.

Measurement and Calculations

ESTIMATED WEIGHT METHOD

If actual weights cannot be measured, estimated weights may be used to determine values of diverted and non-diverted materials. For some estimation methods, actual scale weights may be combined with estimation factors. Estimated weights should be a last resort if actual weights cannot be obtained.

Acceptable estimation methods may include:

Volume to Weight Conversion

- For this method, the volume of the material is used to estimate the weight. There are several sources for volume-to-weight conversion factors such as the U.S. EPA.
- Determine the total amount of waste collected or the number of waste containers picked up over a given period, such as one week.
- Use the dimensions of the waste container to determine the volume (L × W × H).
- Evaluate the fullness of each container as a percentage (i.e., half full is 50%). Multiply the volume by the bin fullness percentage.
- Multiply the resulting volume by the volume-to-weight conversion factor.
- Project teams can choose to manually monitor the fullness of each container and then report the average percent full of each material container/type at collection over the reporting period. This method includes physically observing material volumes to convert to weight. The observation timeframe should be representative of the project. It is recommended that the project team observes the containers for a minimum of one week.
- If the fullness of each container is not observed or is unknown, use the following estimates. This approach provides a conservative estimate for total volume of disposed and diverted material.
  - » For non-diverted materials (landfill, incineration, WtE), assume every container is 100% full at the time of collection.
  - » For diverted materials, assume every container is 50% full at the time of collection.

Measurement and Calculations

Example Calculation Based on Volume

Scenario

Cardboard recycling (flattened) is collected in a four (4) cubic-yard bin three (3) times per week, and bin fullness is unknown. Flattened cardboard has an estimated weight of 106 lb per cubic yard according to the EPA's Volume-to-Weight Conversion Factors.

Step 1: Calculate the volume per month

4 cubic yards × 0.50 bin fullness × 3 pickups = 6 cubic yards per week
6 cubic yards per week × 4.33 weeks per month **= 26 cubic yards per month**

Step 2: Convert the cubic yards per month to a weight

$$26 \text{ cubic yards} \times 106 \frac{\text{lbs}}{\text{cubic yard}} = 2{,}756 \text{ lbs}$$

$$2{,}756 \text{ lbs} \times \left(\frac{1 \text{ ton}}{2{,}000 \text{ lbs}} \right) \textbf{= 1.38 tons per month}$$

EXTRAPOLATION FROM KNOWN WEIGHTS

- In this method, weights for a specific period of time are gathered and then extrapolated out over a longer period of time.
- This methodology is used most often for calculating weights of single-stream recycling, compost, or non-diverted materials. Tenants in a multi-tenant building may use this method to estimate weights for all material types.
- These weights can be taken from the project's **Waste Audit** data or any known weights from a given point in time.

Example Calculation Based on Number

Average weight for wood pallets = 23 lbs

Number of pallets reused monthly = 100

Total weight of pallets reused monthly = 2,300 lbs

$$\textbf{Total weight of pallets reused monthly} = \left(\frac{2{,}300 \text{ lbs}}{2{,}000 \frac{\text{lbs}}{\text{ton}}} \right) \textbf{= 1.15 tons}$$

Measurement and Calculations

Example Calculation Based on Time

Yard waste weight for a week = 1,350 lbs

1,350 lbs × 4.33 weeks per month= 5,845.5 lbs per month

Total weight of yard waste per month = 5,845.5 lbs / 2,000 lbs **= 2.93 tons**

ESTIMATE PER ITEM OR UNIT

- In this method, the weight of an item is used to estimate a larger total of multiple items.
- Collect the weight of the material through the manufacturer, product specifications, packing information, or by weighing the material.
- Determine the total amount of the material being disposed or diverted.

Example Calculation Based on Unit

1 plastic tub = 1 lb

32 plastic tubs per case = 32 lbs

100 cases = 3,200 lbs

3,200 lbs / 2,000 lbs = **1.6 tons**

Measurement and Calculations

CALCULATING REDUCTION AND REUSE

There are two methods for calculating potential diversion numbers through reduction and reuse of materials within the project boundary.

Calculating Reduction

- When a project is able to reduce material use and waste generation by implementing a new strategy, such as reusable materials, the diverted material would be documented under the "Reduction" category.
- The weights of materials not generated due to a reduction action are tracked in the **Zero Waste Calculator** and used in calculations in the same way as the weights for other diversion or disposal methods.
- Calculation method for reduction:
  - » Measure or estimate the weight of the disposed material before the strategy implementation.
  - » Multiply the weight of that material by the amount that is no longer disposed of or no longer being purchased.
  - » Subtract the current weight total of the material from the weight total that is no longer being purchased to get the reduction.
- Note: Reduction weights can continue to be counted every year, regardless of when the initial reduction event took place, as long as the original reduction strategy is still in place and being implemented.

Example Calculation based on Reduction

Scenario

In Year 1, the project purchased 100 boxes of paper that each weigh 40 lb. In Year 2, all office processes went paperless, requiring the purchase of only 20 boxes of paper.

100 boxes × 40 lb = 4,000 lb (prior to the process change)

20 boxes × 40 lb= 800 lb (after the process change)

4,000 lb - 800 lb= 3,200 lb of paper reduced

$$\left(\frac{3{,}200 \text{ lbs}}{2{,}000 \frac{\text{lbs}}{\text{ton}}} \right) = \textbf{1.6 tons reduced}$$

Measurement and Calculations

Calculating Reuse

- Reuse calculations work with materials that would otherwise be disposed of and are instead reused multiple times within the project boundary.
- If the weight is not available through standard methods, reuse weights may be estimated or calculated.
- Reusable materials may not have the same use each month, so the materials may need to be tracked monthly based on how many times they are reused. Estimates may be used but the methodology must be documented in the **Zero Waste Calculator**.
- Calculation method for reuse:
  - » Measure the weight of the material being reused.
  - » Multiply the weight of the material by the amount of material being reused.

Example Calculation Based on Reuse

Scenario

The project reuses 46 wooden pallets every month, with pallets weighing 23 lb each on average.

46 pallets × 23 lbs= 1,058 lbs

$$\left(\frac{1{,}058\ \text{lbs}}{2{,}000\ \frac{\text{lbs}}{\text{ton}}}\right) = \mathbf{0.53\ ton}$$

INTERMITTENT DIVERTED AND DISPOSED MATERIALS

Some disposed and diverted materials may not be generated on an ongoing basis. These materials may be generated due to one-time occurrences, such as renovations or events, or may be generated infrequently due to frequency of use or durability. Examples include, but are not limited to:

- E-waste
- Office furniture
- Construction and demolition materials
- Yard waste (may be seasonal based on location)
- Maintenance and cleaning materials

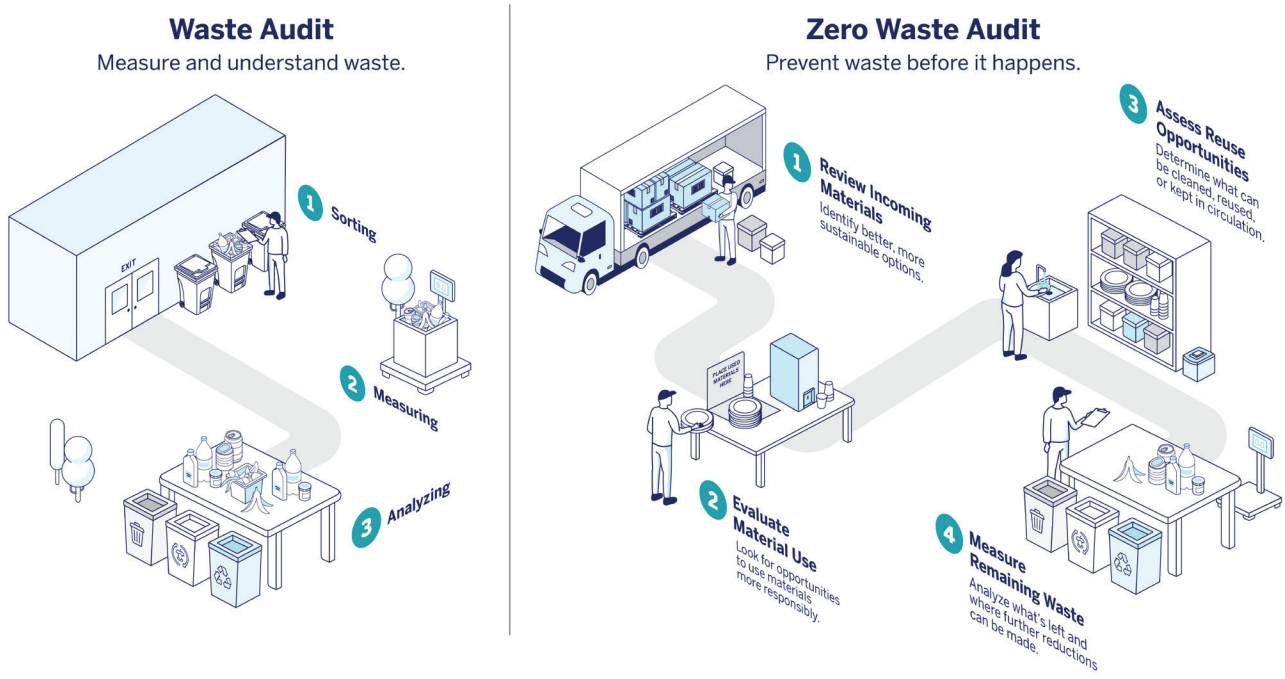
To input these intermittent materials into the **Zero Waste Calculator**, select **Intermittent Generation** from the pull-down menu in the first column of the Waste tab. Input the material weights based on the month or months in which they were generated. If a material is generated only once annually, choose any month to input the total weight data.

Waste Audits

TRUE utilizes **Waste Audits** and **Zero Waste Audits** in the rating system. These two physical and analytical tools are leveraged to better understand the characteristics of waste leaving a project and to reduce waste through systematic waste prevention and reduction strategies.

A **Waste Audit** takes a snapshot of the project's disposed and diverted material types before they leave the project boundary. **Waste Audits** are valuable processes for understanding waste composition, contamination rates, and opportunities for increased diversion. A **Zero Waste Audit**, on the other hand, investigates how to eliminate and minimize waste at the source.

The following are the key differences between the two types of audits and recommended procedures for conducting each.



KEY DIFFERENCES BETWEEN A WASTE AUDIT AND A ZERO WASTE AUDIT

Aspect	Waste Audit	Zero Waste Audit
Definition	Physical analysis of waste, including separation by material and disposal type to better understand waste at the project and identify opportunities for waste diversion and contamination reduction.	Builds on a **Waste Audit** to focus on preventing waste by evaluating materials at each Point of Generation and identifying upstream opportunities for reduction and diversion.

Waste Audits

Aspect	Waste Audit	Zero Waste Audit
Primary Focus	Quantifying waste and diverted materials leaving the project boundary.	Eliminating waste at the source and quantifying waste and diverted materials at the Point of Generation.
Waste Hierarchy Focus	Recycle, Compost, and Disposal.	Redesign, Reduce, Reuse, Recycle, and Compost.
Scope	Characterizes all disposed and diverted materials (recycle, compost, landfill, incineration, etc.) to understand composition, contamination, and opportunities to improve diversion.	Evaluates a project's overall material flows to identify opportunities to prevent waste from being created. This includes redesigning products, packaging, and operations to avoid waste generation and finding creative solutions to reuse materials that cannot be reduced.
Approach	Involves sorting and determining the weight of disposed and diverted material types over a set period (e.g., a day or a week) to better understand waste composition and identify sources and amounts of any contamination.	Involves analysis of: • Materials at the Point of Generation(s) (e.g., materials entering the project that end up as diverted or disposed materials); • Downstream waste (e.g., materials that, at the end of life, are destined for recovery and disposal, or result in contamination); and • Circular economy principles (e.g., reuse, repair, compost, or elimination of non-circular materials).
Outcome	Data on waste composition and diversion, including contamination. Opportunities to reduce contamination and increase diversion.	Data on waste composition and generation with an actionable plan to progress toward zero waste.

Waste Audits

PROCEDURE FOR A WASTE AUDIT

The following is a recommended procedure for conducting a physical **Waste Audit**.

- Work with janitorial or operations staff to set aside a sample of diverted and disposed materials (waste) collected throughout the project boundary. It is recommended to collect at least a full day's or shift's worth of waste. Separate or designate the bags by outlet, such as recycling or trash.
- Collect the waste in a designated space for the **Waste Audit**. Ensure the location has space to segregate and sort the different waste streams and is in a safe area.
- Use a **Waste Audit** tracker and input the different locations from which the waste was collected. Examples include office, breakroom, kitchen, production line, etc. Be as specific as possible.
- Start sorting for one source location and one intended outlet. For example, start with waste from the office area designated for trash.
- Sort the waste into distinct categories to understand material makeup. For example, for the office trash, categories could include plastic bottles, cans, food wrappers and containers, food waste, paper, or e-waste. Be as granular as possible in categories to get a full understanding of the waste.
- Consider sorting by material category and material subcategory if the quantity or impact of the material type is high. This can also support the requirements for **MAc1: Expand Material Tracking**. For example:
  - » Material Category: Plastic
  - » Material Subcategory: Polyethylene Terephthalate (PET) Bottles
- Input the categories into the **Waste Audit** tracker.
- Sort all waste from one location and outlet into the categories. When sorting is complete, weigh the total amount of waste from each category. This can be done by putting the waste into a trash bag and using a hanging scale or by using a floor scale.
- Document the weights for each category in the **Waste Audit** tracker.
- When finished with the waste for each source and outlet, collect it and dispose of it in the proper waste stream.
- Repeat these steps for the other outlets. During the process, consider and note any initial opportunities for improvement, such as through contamination reduction or alternative materials.
- Take photographs and make notes throughout the process. These are required for documenting **MAp2: Conduct a Waste Audit**.
- Ensure all weights, source locations, categories, and intended outlets are documented in the **Waste Audit** tracker.
- For waste streams that cannot easily be sorted and weighed, such as large items, document the methodology used to estimate the weight. For example, if there are multiple pallets going to recycling, get an estimated weight of one pallet and multiply by the total number of pallets that are being recycled.
- When finished with the physical audit, use the **Waste Audit** tracker to analyze the results. Designate which categories in each waste stream were contaminants, such as recyclables in a trash stream. The tracker will provide estimates of contamination rates based on the source location and waste stream. Identify the top three (3) material types categorized by end-of-life method.

Waste Audits

PROCEDURE FOR A ZERO WASTE AUDIT

The following is a recommended procedure for conducting a **Zero Waste Audit**. The **Zero Waste Audit** can be done in parallel with the **Waste Audit** or as a separate activity.

- Establish a **Zero Waste Audit** team with appropriate personnel, such as the Zero Waste Manager, TRUE Advisor, operations/facility manager, procurement personnel, and service providers.
- Determine all applicable Points of Generation for the project. For more information, see the Points of Generation section.
- Conduct a walkthrough of each Point of Generation. It is recommended to conduct the walkthrough during a typical or representative day. During the walkthrough:
  - » Evaluate collection bins, including signage, layout, and type.
  - » Review bins to see common materials disposed of in each bin. Note any potential contamination.
  - » Review purchasing records and/or interview personnel to understand top materials used and disposed of or diverted at the Point of Generation.
  - » Understand ongoing consumables and single-use items.
  - » Discuss challenges and opportunities with personnel.
- Review janitorial procedures for collecting materials.
- Identify the top three (3) materials generated for diversion or disposal at each Point of Generation.
- Analyze opportunities for reduction or increased diversion, starting with upstream strategies, followed by strategies within the project boundary and downstream.
- To identify opportunities for reduction:
  - » Interview personnel who have responsibility for inbound materials at the project to investigate ways to reduce or eliminate materials from the procurement strategies. In addition, interview personnel with responsibilities for outbound materials to understand strategies to increase diversion.
  - » Review purchasing policies and procurement procedures for any materials that enter the project boundary, including, but not limited to, consumables, durables, packaging, and raw materials.
- Analyze opportunities to move the diverted and disposed materials up the Zero Waste Hierarchy, with the goal of reducing material use and waste. Reduction can be achieved through strategies, including, but not limited to, redesigning systems, evaluating alternative materials or packaging, and switching from single-use items to durables.
- Evaluate existing collection bins, signage, and educational materials to ensure effective communication and training to personnel.

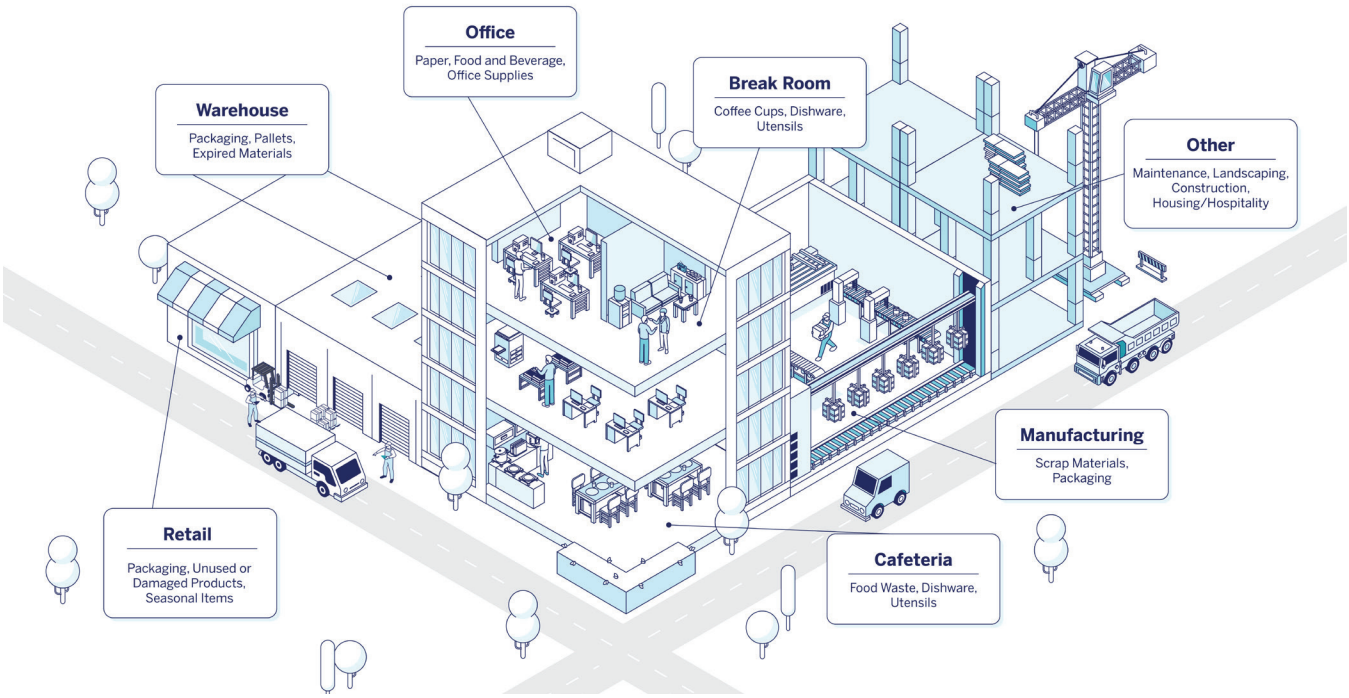
Points of Generation

The Points of Generation are areas within a project that are sources of diverted and disposed materials. The areas can be unique to each project but help categorize strategies, procedures, and zero waste efforts. Each Point of Generation will have different material types, associated diversion or disposal methods, as well as varying strategies to achieve zero waste.

By reviewing the project through the lens of the Points of Generation, project teams can identify challenges and opportunities that are specific to each area, leading to a more successful progression toward zero waste.

To identify the Points of Generation within the project, consider the different functions within the project boundary. Consider the different activities that occur during typical operations and the roles of on-site personnel. There are no minimum restrictions for space to designate a Point of Generation; a point is a common source or process from which materials are generated.

A list of potential Points of Generation and example materials for each follows. The list, however, does not encompass all generation points and materials, as these areas are specific to each project.



Points of Generation

POTENTIAL POINTS OF GENERATION

Point of Generation	Example Materials
Office	Paper, office supplies, food and beverage, packaging, and e-waste
Warehousing and Distribution	Packaging, pallets, and damaged or expired materials
Food Services, Including Cafeterias and Breakrooms	Food waste, coffee cups, coffee pods, dishware and utensils, and food preparation scraps and packaging
Grounds and Landscaping	Grass clippings, yard waste, landscaping treatments, and tools
Construction, Including Renovations	Concrete, wood, metal, and insulation
Manufacturing and Production	Raw materials, scrap materials, packaging, and cleaning supplies
Retail	Packaging and expired or damaged products
Housing and Hospitality	Food waste, dishware, utensils, cleaning supplies, and packaging

Scope 3 Emissions

Greenhouse gas emissions are categorized into Scope 1, Scope 2, and Scope 3 emissions. Scope 1 emissions are associated with the direct greenhouse gases from operations owned or controlled by the project. Scope 2 emissions are associated with indirect greenhouse gases from purchased energy such as electricity, steam, or chilled water.

Scope 3 emissions, however, are associated with the greenhouse gas emissions from a project's value chain—both upstream and downstream. Scope 3 emissions are critical to measure and manage as they often represent the largest share of a project's emissions. There are 15 Scope 3 categories to establish the upstream and downstream impacts of a project.

Materials and waste impact multiple Scope 3 categories, including:

Category	Description
Category 1: Purchased Goods and Services	Extraction, production, and transportation of goods and services
Category 2: Capital Goods	Extraction, production, and transportation of capital goods
Category 4: Upstream Transportation and Distribution	Transportation and distribution of purchased materials
Category 5: Waste Generated in Operations	Disposal and treatment of waste generated and the transportation of waste
Category 12: End-of-life Treatment of Sold Products (for manufacturers)	Waste disposal and treatment of products sold at end-of-life

Categories 1 and 2 are critical to achieving zero waste and a circular economy, as the extraction and processing of materials account for over 55% of greenhouse gas emissions globally.

TRUE v2 has a key prerequisite and credits to support the preliminary estimation of Scope 3 emissions for the project.

Credit No.	Credit Title	Scope 3 Category
PIp2	Evaluate Greenhouse Gas Emissions	**Category 5: Waste Generated in Operations**
PIc3	Evaluate Material Emissions	**Category 1: Purchased Goods and Services** **Category 2: Capital Goods**
PIc4	Calculate Transport Emissions	**Category 5: Waste Generated in Operations**

Scope 3 Emissions

The prerequisite and credits, along with the **Zero Waste Calculator**, support a project in understanding the impact of materials and waste on emissions. The requirements in TRUE v2 are focused on the measurement of emissions to help provide foundational data and education. The data, however, can be used by projects to begin evaluating emissions reductions over time.

The prerequisite and the credits all use the **Zero Waste Calculator** to calculate associated emissions.

PIp2: EVALUATE GREENHOUSE GAS EMISSIONS

The data populated in the **Zero Waste Calculator** in **MAp1: Standardize Waste Tracking System** is used to calculate the greenhouse gas emissions associated with the disposal and treatment of waste. Follow the instructions in the **Zero Waste Calculator**, ensuring that each material type has the correct end-of-life method selected.

PIc3: EVALUATE MATERIAL EMISSIONS

This credit supports calculations for **Category 1: Purchased Goods and Services** emissions. If capital goods are included in the evaluation, it also supports **Category 2: Capital Goods**.

Existing Scope 3 Inventory

- An existing Scope 3 inventory for the project can be used in place of **PIc3: Evaluate Material Emissions** if the inventory includes **Category 1: Purchased Goods and Services** and was conducted within the last 24 months prior to the end of the reporting period. Optionally, include **Category 2: Capital Goods**.
- Provide the inventory and the calculation methods used. Supplier-specific, hybrid, average-data, and spend-based are all acceptable forms of calculation methods.
- If only a company- or portfolio-level inventory is available, estimate the emissions associated with the project and provide the methodology and assumptions for the estimate.

Using the Zero Waste Calculator

- Projects without an existing Scope 3 inventory can use the **Zero Waste Calculator** to conduct a preliminary calculation of the **Category 1: Purchased Goods and Services** emissions.
- The **Zero Waste Calculator** uses a calculation methodology called the spend-based method for calculating Scope 3 emissions for this category. Per the Greenhouse Gas Protocol, the spend-based method estimates emissions for goods and services by collecting data on the economic value of goods and services and multiplying it by relevant secondary emission factors. The secondary emission factors are usually industry-average factors derived from the monetary value of goods. The spend-based method is often used for initial Scope 3 assessments as the data (both cost data and emission factors) can be easier to obtain than other methods. It can also provide a screening of data to prioritize future data collection and calculations.
- The **Zero Waste Calculator** has a dataset of material categories with spend-based emission factors. In the Purchased Materials tab, list each of the top twenty (20) materials being evaluated in the credit. For each material, select the most appropriate material subcategory. If a material purchased could fall under multiple subcategories, pick the one that makes up the largest portion of the material.

Scope 3 Emissions

- Enter the total amount purchased in U.S. dollars by month or annually for the reporting period. The **Zero Waste Calculator** will calculate the spend-based emissions for the reporting year for each material.

PIc4: CALCULATE TRANSPORT EMISSIONS

- Using a mapping tool, estimate the total distance each Material Subcategory travels from when it leaves the project boundary to when it reaches the final destination.
- To calculate the emissions from waste transport, follow the instructions in the **Zero Waste Calculator**.
- Use the Transport tab to fill out the distance to each service provider and the transportation method used to transport the materials to their respective outlets. The distance, with the weight data, will be used to calculate the emissions from the transportation of waste.

For more information regarding Scope 3 emissions, refer to the Greenhouse Gas Protocol.